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FUNDAMENTALS OF CATHOLIC TEACHER TRAINING

When the history of the present stage in the development of the Catholic school system in America comes to be written, its pages will glow with tribute to the splendid zeal of our religious teachers, who, without stint of time or effort, are devoting themselves to the improvement of their professional standing. Saturday is no longer anticipated as a day of rest and freedom from class-room routine. In late June, when school is over, the path of the religious leads to the portals of the summer school. Spare time is swallowed up by the demands of the correspondence course. At the present time, our proud boast that in our schools the teachers devote *all* their time to education is literally true.

Zeal, however, has a fashion of running away with discretion. Many a good cause has been injured, if not defeated, by the enthusiasm of its votaries. There is always the danger of going too fast or of losing one's sense of direction. Cautious observers are voicing misgivings as to the wisdom of some of the measures we are employing to improve our teachers. We would be made perfect in too short a space. The strain is becoming too great, and there is danger of reaching the breaking point. And, what is cause for greatest concern, we seem to be forgetting that Catholic education is *sui generis*, that it differs fundamentally from secular education, and that this difference must reveal itself nowhere more strikingly than in the formation of the teacher.

The Catholic normal school is just one particular department of Catholic education. The principles that should dominate it are the same as those which should dominate any other

department, say the elementary school or the ecclesiastical seminary. It has its particular function, training in the art of teaching, but this training must be rooted and founded in the Truth for which Catholic schools exist. Otherwise Catholic schools may continue to exist in name only. Preparing to become a teacher is not like learning a trade. An apprentice may acquire the skill of a plumber from an atheist master as well as from a Catholic. The art of plumbing is not intrinsically dependent on any particular philosophy of life. But the art of teaching in Catholic schools is. One becomes a good teacher, not by learning a few tricks of the trade, but by becoming better educated personally, and at the same time becoming adept in the use of methods and devices that are best suited to the task of educating others. The work of the teacher is so essentially human that philosophy enters at every step. The philosophy of the plumber has little to do with the manner in which he handles a wrench; the philosophy of the teacher has everything to do with the manner in which he deals with the child. At no step in the educative process can we escape metaphysics. What is the essential aim of education? What is the truth concerning child nature? What principles shall be inculcated and by what means? Not one of these questions can be answered except on the basis of one's philosophy of life. Truth is one. We cannot teach one branch according to Christian principles, and another on the basis of naturalism. If, in the Catholic scheme of education, all sciences grow out of religion, in which they find their source and ultimate meaning, then surely no exception can be made in the name of the science we call pedagogy. Even secular educators realize this, as witness the following statement of one whose philosophy of education is anything but Catholic.¹

. . . A theory of education is at bottom a theory regarding the nature of man and his place in the universe. The question of aims in education is inextricably bound up with questions such as evolution, democracy, and the nature of ideals and of duty; while the problem of method is determined largely by our conception of the nature of interest and of intelligence. It is not surprising, therefore, that our theory of education

¹Bode, Boyd H., "Fundamentals of Education." New York: Macmillan, 1921, p. 163.

should be just an expression of our philosophy of life. Our view of man's nature will inevitably direct our choice of the methods that are suitable for his training, and the selection of the ends that are most worth while.

Catholic teacher training, then, being but one phase of Catholic education, must be guided by what Catholic philosophy teaches concerning the origin and destiny of man, and the nature of the human mind. There is one other point that needs emphasis, namely, Catholic doctrine concerning the nature of truth. On all of these points, Catholic teaching is explicit. We may not adopt educational practices that clash therewith.

Let us consider these three elements somewhat in detail, together with their pedagogical implications. To begin with, the moment we begin to formulate aims in education, we are thrown back on what we believe to be the end and purpose of human living. What is the final destiny of these beings we are striving to educate? The penny catechism gives us the answer of the Church: "God made man to know Him and love Him, and serve Him in this life, and to be happy with Him forever in the life to come." Every human being born into this world is destined for an eternal happiness that will result from a complete union with the God Who made him. The span of human life is a period of trial and probation. We find ourselves in the midst of persons and things which we are to use in such manner as to give glory to God and thereby render ourselves more worthy of the happiness that has been prepared for us. In a word, our chief business in life is the sanctification of our souls. All else is secondary and contributory. The invisible things of Him are made known by the visible things He has made. Increase of knowledge brings increase of love. Greater love inspires greater service. We serve God by obeying His will. This will is expressed in the Natural Law, in the Commandments, in the circumstances of our daily lives. It reveals to us what must be our attitude toward our fellowman, toward the material world, toward the things of life, toward ourselves. The moment we assume an attitude contrary to the will of God in any of these relations, we commit sin; for it is the very essence of sin to give to creatures the honor that is due to God alone.

In order to enter into life, we must love God with all our

heart and soul and mind and strength, but we must also love our neighbor as ourselves. "If any man say he loves God, and hateth his brother, he is a liar." "By this shall men know that you are my disciples that you love one another." Our salvation demands that we live up to all our social and civic obligations. No man can live for himself alone. God created us social beings, and the laws that govern social life are God's laws. Citizenship with us is a matter of obligation in Christian charity. Lack of loyalty to one's country is a sin, a violation of the law of God. Failure to do one's share in all that concerns the common weal is to prove recreant to the principles of our Holy Religion. In the measure in which we succeed in overcoming our selfish desires and impulses and devote ourselves to the service of our fellow-man, we increase in sanctity and grow up unto the measure of the age and stature of Christ.

In the same manner, the material environment in which we live must be made to serve the higher ends of life. Man's conquest of nature has served in the main to increase the happiness and comfort of human living, and this in turn serves to give us more time for the things of the spirit. The wonders wrought by modern science inspire a deeper admiration for the wisdom and power and beauty of God. To search out the laws of nature is in reality to seek a fuller knowledge of the Mind of Him Who made them. To neglect the conquest of nature, to fail to acquire the intelligence which a knowledge of natural forces yields, to rest content with being in bondage to the environment instead of striving to adjust the environment to human needs, is to disobey the primal injunction that God placed on man: "Increase and multiply and subdue the earth."

But whether we are striving to cooperate with our fellow-man or addressing ourselves to the problem of subduing the earth, the fundamental purpose is always the same. Every bit of knowledge we garner, whether of men or of things, whether from history, or literature, or art, or science, brings us to a fuller realization of the glory of God. The more completely we lose our lives in the service of others, the more completely we find them in God. Every effort of the will, every sacrifice in the performance of duty, every bit of labor expended in whatever field of human endeavor, develops that something within

us that we ordinarily call character, but which, in the Christian soul, is sanctity.

Now such a view of life will manifestly set a different value on educational aims and processes than will a view that regards this life as the term of all human hopes, that refuses to seek its heaven beyond the confines of earth, that dismisses as idle and superstitious all speculation concerning a future life, that sees in social betterment, in vocational fitness, in physical well-being the only valid goals for human striving. A teacher trained under masters whose whole point of view is naturalistic and secularistic is surely poorly prepared to plant the seeds of Christian living in the hearts of Catholic children. In the final analysis, the Catholic school is one of the means the Church uses in exercising her teaching office. Hence, she demands teachers who are imbued with Catholic truth and formed according to Catholic principles. A secular philosophy of education will never do as a means of sanctifying souls.

In the second place, the Catholic teacher must have a true conception of human nature. Here again we turn to Catholic philosophy. Man is a creature composed of body and soul. The soul is a spiritual entity, owing its existence to a special act of creation. It is incorruptible and immortal by nature, united to the body in such a way as to be its single substantial form. It determines the nature of man, giving him all that differentiates him from other beings. It is the principle of all human activity. Because he has a soul, man has an intellect, which is not the result of organic evolution but which is *intrinsically independent* of any organism. Because man has a body, he has many things in common with lower animals, mechanisms and drives, instincts and reflexes, tropisms and reactions, but his mental life is not completely explainable in terms of these. His psychology differs specifically from that of the brute.

Though not intrinsically dependent on the organism, and capable of existing without the organism, the human intellect, because man is a composite being, is, during this life, *extrinsically dependent* on the nervous system, on the brain, the sense organs, the afferent and efferent nerves, for the materials out of which it fashions its knowledge. Sense perception, memory, imagery—all of these have a neurological explanation. But

abstraction, which gives us the real meaning of things, is the active function of the intellect, the *intellectus agens*, and is not a passive reaction.

Intellect is not the only faculty of the soul; it also has a capacity we call the will, the power to choose what we intellectually apprehend as good. That choice is free, though this freedom is often limited because our intellectual apprehension is cloudy, or because of the clamor of passions, desires and impulses that minister more directly to the body, or because of habits of acting previously acquired. But in spite of these handicaps, the will always has the essential power of self-direction, and barring cases that are distinctly pathological, may assert its independence. A weak will may be strengthened by exercise. Self-discipline is the process whereby we bring all our vagrant impulses to heel and direct our lives and actions in accordance with the dictates of reason.

Thus we see that while the soul is not derived from the body, nor dependent on the body intrinsically for its power to act, yet because of its close union with the body, it cannot think and will with the same freedom as can a pure spirit. There is nothing in the intellect that was not previously in the senses, and if sense perception, memory, and imagery are faulty, intellectual apprehension will be faulty. Likewise, if the rational appetite fails to dominate over sensitive appetite, our emotional life will be on a low physical plane. Now in the task of thinking clearly and willing strongly, we must reckon with Original Sin. When man first came forth from the Hand of God, he was endowed with gifts and prerogatives that transcend nature. They were not his natural due as a human being, but were the free and gratuitous gift of God. Man was created in the image and likeness of God and destined for supernatural happiness. He received the life of grace over and above the life of nature. Man failed in the test, disobeyed God, and thereby forfeited this supernatural life. He was reduced to a natural level, and there he would have remained were it not for the Redemption wrought by Our Lord and Savior. Left to his own natural resources, man finds his intellect darkened, his will weakened, while there is in him a strong tendency to lower things. Because of these disabilities, it is next to impossible for a man to lead a good

life, even on a purely natural plane, let alone conduct himself as a child of God and an heir to Heaven, redeemed by the Precious Blood of Jesus Christ. He needs help from above, the grace of God, without which it is impossible for him to keep his soul holy and pleasing in the sight of God. The human race cannot save itself. It needs the light of faith to dispel its ignorance, the strength of God to support its weakness. "Without Me you can do nothing," says Christ. "I can do all things in Him that strengthens me," says His Apostle. The salvation of the human race will not come from material evolution, nor from the efforts of unaided human nature. "There is only one name under Heaven, wherein all men shall be saved."

Summing it all up, what do we find? Human nature is spiritual and it is corporal. It has much in common with the brute, yet it is constituted a little less than the angels. It has the power of self-direction, yet this power is bound up in the infirmity of Original Sin. It is weak in its own right, yet power is made perfect in its infirmity. All of these paradoxes must be taken into account by those who are called to guide the child's first steps in the morning of life and direct them to the paths that lead to Heaven.

This psychology cannot be learned from those who regard man as nothing more than a highly evolved animal, who deny the existence of the soul, who regard freedom of the will as a superstition, who mock at the notion of Original Sin and scout the necessity of grace. For the soul, they substitute a reacting nervous system. Everything is explained on the basis of bonds between the stimulus and the response. The determination of activity comes from without, from the stimulus, around which responses are organized. The Behaviorist would rehabilitate human nature *ab extra*. The corollary of his theory is: Improve the environment and you will improve the race. He forgets that, unless you first improve the race, it is impossible to improve the environment.

Or there is the other psychological theory that abhors all repression, that traces all human ills to the fact that people, particularly in their youth, are restrained from following their natural impulses. Freedom of expression, it demands, an unshackled self. Do not make the child the slave of con-

ventions. Avoid stunting his mental growth by forcing him into the strait-jacket of a moral code. A strange saying surely, to those who believe in Original Sin—not easily squared with the Word of Him Who said, "If any man will come after Me, let him deny himself and take up his cross and follow Me."

In the third place, the Catholic teacher must have a correct notion of the nature of truth. Catholic thinking takes its start from first principles, which it accepts as immutably true. In support of these, it appeals to reason. Over and above this it calls for acceptance on Faith, of certain truths revealed by God, that cannot be demonstrated on the basis of human knowledge. We believe that we may know. Outside the range of these principles, the Catholic mind is as open as any to argument and evidence. But it refuses to waste time with any theory that violates these principles, because it knows it cannot be true. The Catholic Church has never stood in the way of the advancement of truth, though she has refused to be led astray by guesses and half-truths. She has nothing to fear from the conclusions that the human mind arrives at by valid logic; but she knows that false prophets may sometimes deceive even the elect. She does not apologize for exercising authority in matters intellectual, for she knows that without authority there is no intellectual progress.

But the prophets of the day are condemning such use of authority. Truth, to their notion, does not consist in the mind conforming to reality; it does not consist in conformity at all, but in experiment. They shudder at the mere mention of first principles. Principles stand in the way of progress; they exalt the *status quo*; they limit the field of thinking. The idea is not the similitude of the object expressed in the intellect; it is a plan of action. It is true, not if it conforms to reality, but if it works. Even then there is some room for doubt, for some other plan of action may work better. Faith was a good enough makeshift in an ignorant past; it is mental suicide today. It is all wrong to be too definite in what we require children to learn, because what we are teaching them may not be so. Teach them to experiment not to conform; train them to doubt, never to believe. Give them "Facility to understand and appreciate all human interests. Liberate their capacities." But avoid fixed aims. What is truth? they ask

like Pilate of old, yet are forever turning away lest they hear the answer. And Christ is being crucified by the sins and crimes of those who put the doctrines of pragmatism into practice, whose sole norm of truth and justice, of right and wrong, is the question: Will it work?

We have sketched these points somewhat in detail, first of all because they are the basic principles from which Catholic pedagogy is derived, and secondly, that by bringing them out in relief we may see how essentially they differ from the principles that dominate the current secular educational theory. It is impossible to graft them on to a pedagogical training in other respects secular. They cannot be supplied by the "atmosphere" of the religious life. As a matter of fact, secular teacher training would be bound, in the end, to interfere with the religious life. A cleavage would result that would be detrimental to both the spiritual and professional life of the religious. What we are looking for mainly, in the preparation of our teachers, is character formation. We need teachers developed in the spirit of Christian principles who, in every method that they follow and in every device that they use, will be showing forth the truth that is in them. We do not judge a Catholic teacher solely by his skill in teaching reading and writing and arithmetic, and his ability to handle a class. We expect such skill, to be sure; but we are primarily interested in whether he teaches reading, writing, and arithmetic, and manages his class in such a manner as to bring his pupils nearer to God. Pedagogical skill is necessary, but it is the spirit that counts most. This spirit is not acquired at the feet of masters who know not Christ. The Church has, time and again, pointed out to her teachers of philosophy and theology that their only safe norm is the doctrine of St. Thomas Aquinas. Now every teacher in the Catholic system, whether in the kindergarten or university, is dealing with aspects of theology and philosophy. Let us beware of changing the wisdom of the Angelic Doctor for the pragmatism of a Dewey, the mechanisms of a Thorndyke, the secularism of a Parker.

There is danger of such an exchange being made in these days, when so many of us are seeking state approval for our Catholic normals. The tendency to look for such recognition

is of recent origin and represents an attempt to disarm the critics of our schools and to forestall legislation that would destroy the Catholic system. It is largely a compromise measure. Some few states have passed laws looking to the certification of teachers in non-public schools. Others are contemplating doing so, but largely because the suggestion has come to them from our teachers themselves, who are voluntarily working for state certificates. The things that have transpired in Michigan and in Oregon have stampeded us to some extent. To save our schools, we are considering the sacrifice of certain prerogatives that we do not deem essential.

Now compromise is always a critical enterprise, and we must keep our eye on ultimate consequences. It would be easy enough to drift into a situation in which our schools would be Catholic in name only. We cannot adopt the standards of secular education and still pretend that we are maintaining Catholic schools.

That the state has certain rights with regard to education, we admit. The welfare of the nation demands that every child receive an education adequate to the demands of citizenship and in accord with our national ideals. But this does not imply the right of the state to control all schools, to dictate as to curricula, methods, or administration. The state is concerned with the results, not the process. Secular schooling is one process, Catholic schooling another, private educational enterprise still another. As long as these schools turn out good citizens, the state need not worry. History shows that all educational progress has been due, not to the state, but to private initiative. State control always trammels, reduces things to an approved routine. Freedom is necessary for experimentation and the development of new ideas. This freedom the private school enjoys, and it is to the interest of the state not to interfere therewith. If a system of religious schools can turn out better citizens than a system of secular schools, the sooner the state discovers it the better.

Events have proven that the Catholic school is an asset to American democracy. Catholics as a body are characterized by a seriousness of purpose, a devotion to duty, and a respect for law and order, that are outstanding. They have never failed the country in an emergency, and in their every-day life they

are the kind of people who make up the very sinew of the nation. With a Catholic patriotism is not a matter of sentiment or hurrah; it is rooted in conviction. He sees in the laws of his country the Will of God. He lives up to his obligations as a citizen, because failure to do so is a sin and, as such, interferes with his first aim in life, his eternal salvation. He is a good American because he is a good Catholic. He loves America because America stands for all that his religion teaches him is worth while. This nation was founded on Christian principles, on the teaching of Jesus Christ concerning human relations. No man is better fitted to uphold its institutions and contribute to its progress than he whose mind has been fed from infancy on the teaching of the Gospels.

Hence, looking at the matter from the standpoint of results, the state has no cause to be concerned about the Catholic school. There is no reasonable justification for legislation concerning the certification of our teachers or the supervision of our schools. By such legislation the state implicitly abrogates to itself the sole right to educate, a right which it does not enjoy, interferes with the primary right of the parent to determine the education of his child, and hampers the Church in its constitutional right to preach the Gospel. If the state were contributing to the support of our schools, it would have some right to supervise the manner in which the money were used. But until we ask for a share in the state funds, to which we really have a just claim, we must not be hampered by unnecessary and bothersome laws.

The best way to meet the issue, in so far as it affects our teachers, is to organize and standardize normal training in every diocese in the country. The basis for such standardization was laid down in the decrees of the Third Plenary Council of Baltimore.² The method of administration will differ according to conditions in different parts of the country. In some places, a central diocesan normal, which all teachers will attend, may prove the best solution. Where this is impracticable, let the community normal be the unit, the diocese supervising the work of the individual communities, setting

² McCormick, Rev. Patrick J., "Church Law on the Certification of Teachers." *Catholic Educational Review*, Vol. xx, No. 5, May, 1922, p. 257.

the curriculum and passing on the candidates for certificates. The diocese can likewise provide certain general courses, such as the philosophy and psychology of education, that are best given by a priest or someone trained in philosophy and theology. The course of study should be carefully worked out and should be based on scientific principles of pedagogy. Large communities that are not diocesan in character should be standardized either by accepting the standards of the diocese in which the mother house is located, or by affiliating with some general standardizing agency like the Catholic Educational Association, the Catholic University, or some recognized Catholic institution.³

This writer has been of the opinion for a number of years that we need a general standardizing agency for Catholic normal schools. The Catholic Educational Association is in a logical position to perform such a function. It is a voluntary organization; it is a member of the American Council of Education; it now standardizes Catholic colleges and high schools. Its functions should be extended so as to take in diocesan systems of teacher training. It might administer this work on a regional basis. Then, if there is any question of state interference, teachers could show credentials certified by the Association, and fully as valid as those issued by the North Central or any of the great regional standardizing bodies. Such an arrangement would satisfy any demands from without, the while it would safeguard the principles of Catholic education from within. It would give our teachers the assurance they need and put a stop to their going to the state for the "protection" they claim we do not give them.

GEORGE JOHNSON.

³The Diocese of Toledo is experimenting with the plan of a central diocesan teachers college. The Diocese of Brooklyn is working on the plan of the supervised community normal. See McClancy, Rev. Joseph V.S., "The Community Normal," Catholic Educational Review, Vol. xx, No. 5, May, 1922, p. 264. Also Bulletin of Training Courses for Elementary School Teachers, 1923-24, Teachers College of St. John's University, Toledo, Ohio. Procurable from Rev. Francis J. Macelwane, 2535 Collingwood Avenue, Toledo, Ohio.

THE SOURCE AND MEANING OF INTELLIGENCE

Out of the realm of arm chair thought, out of the confines of experimental psychology, out of the military field of practical application, there has emerged into the ken of general discussion the matter of intelligence tests. The popular magazines have taken up the topic. Mr. H. Addington Brace, easy exponent of problems of behaviour, has written his little disquisition. Mr. Walter Lippman, a genial theorist out of Harvard and the *New Republic*, who has drifted and mastered here and there and told the people what is the matter with politics and diplomacy and public opinion, speaks his piece. The young intellectuals are ready to cite the authority and bandy the names of Terman and Yerkes and Yoakum as glibly as if they knew and had digested the careful research reports of those scholarly gentlemen. And we have arrived at the same situation as always. Superficial thinkers are accepting semi-scientific statements as dogma, and on insufficient data are ready to be off with the old fashions and on with the new.

First it should be understood that psychology is a new science, changing in its conceptions and underlying principles almost from day to day. It is an experimental science with but scattered and inconclusive experiments on which to found its hypotheses. The intelligence tests themselves are only hesitatingly accepted by sound psychologists, and only with reservations. In spite of the extensive researches of army work in this regard, in spite of numerous uses of these tests in the schools, they are still deemed insufficient evidences of actual facts. This is the reason that honest academicians and practical pedagogues refuse as yet to commit themselves to widespread and wholesale adoption of them for educational purposes.

Secondly, it should be understood that the tests aim to measure native ability. Their purpose is to distinguish between varying degrees of physiological capacity in thinking. They are designed in an attempt—admittedly unsuccessful in part—to determine innate differences due to hereditary factors and purely physical properties of the individual mind. They are

based on the assumption that some persons have genius and some are subnormal. They start with the idea that one man is capable of mastering higher mathematics and another incapable of performing those rapid mental processes of coordination, comparison, memory, recognition, and selection necessary for real thinking. In order to learn to think, one must be able to think, says John Dewey. And anyone who has ever taught, in school or college, knows that there are some students who simply are unable to progress beyond the sixth grade in school or to master elementary doctrines in physics and their applications which appear in the Freshman year in college. The tests start on the assumption that there are individual differences in ability to think.

In so aiming the tests are hampered by difficulties at every turn. Human beings communicate with one another by means of language. They compare concepts by means of common words and figures, shapes and sizes. In comparing intelligence, we have to employ phrases and word meanings and geometrical ideas. In comparing intelligence, then, we must use to some extent the training and knowledge secured through education and environment. These are kept as simple as possible, and so far as ingenuity can devise retained within the bounds of what are conceived to be common knowledge. Yet however simple and common they may be made, they are very likely to reflect education, and confuse training with innate ability. These facts are recognized by all serious and scholarly investigators of the subject. The so-called "social" factors of intent, and thoroughness, and interest, and "backgrounds," and efficiency of early training, exert a positive influence on the results of the tests. Yet there is a very definite belief to the effect that above and beyond all this, hidden among the complexities and plural causes which affect the results of the test, there still is a measure of positive intelligence as something inherent in the individual and not at all dependent upon his early schooling, training, or environment. Our facts and calculations may not be complete enough or correct enough. Still they are sufficiently so to indicate that individual differences do exist, and exist from heredity, not environment.

To this idea the facile journalist, Mr. Lippman, will not

agree. Perhaps he is still obsessed with liberal ideas. Perhaps he still would feel that the "capacity for perpetual improvement" advocated by that early anarchist William Godwin exists in a positive, physiological and fortuitous way. Nor is it strange that a gentleman like Mr. Lippman should adopt such a view. Liberalism has always meant equality among all men. Liberalism has always meant that with equal training or "advantages" all men would be equally capable of entertaining and applying liberal ideas. A well-known psychologist remarked to me that if Mr. Lippman took any other stand he would simply talk himself out of a job. Improve the conditions and you will improve the people, the radicals have been saying. The value of a thoroughbred, they might as well say, depends on the breeding, not on the blood.

Of course, this is in one respect a purely theoretical question. If the social factors be so important, if mere knowledge be in so much demand, if the ability to use knowledge be of no value without the knowledge, of what value is mere intelligence. We all recognize that mere intelligence, as the psychologists use the term, is rarely adverted to. Seldom would a man care whether one-fifth of a second separated the speeds of two different individuals in associating the ideas "hat" and "head." The common conception of "intelligence" means that a man is well posted, that he has had experiences, educational or practical, upon which to draw when thinking out the problems which will confront him. This is the serviceable conception most usually found in commercial, and even in intellectual, occupations. Yet the differences in intelligence are not purely theoretical. A man with the ability to think rarely remains at routine jobs; he becomes an executive. The difference is a difference in intelligence, in the strict sense of that word. Indeed, a superiority in intelligence, so understood, frequently causes a man to hold higher executive positions who has never acquired or who has forgotten the mere factual knowledge possessed by persons in inferior grades of work. For example, the superior reasoning powers of men as compared to women—very nearly scientifically established on the general average by recent experiments—may be one of the most important contributing facts in making most executives men instead of women.

It can scarcely be denied with any obligation for belief that there are innate differences in intelligence, that these differences exist at birth. Conclusive experiments would indicate this, though we cannot as yet say that they prove it beyond a doubt.

Intelligence, when we have it, is a native quality. It is inherent in each individual. It is part of the equipment with which he starts the battle of life. For it he should be duly thankful. It is a gift of God. As such it should be made the most of, and not neglected. It should be developed and improved and rendered more and more applicable to the conditions of life. And it can be so developed and improved. Says an eminent psychologist: "Although a man has reached the limits of his mental capacity at 16, by exercising that capacity he can improve it almost continuously until he reaches the age of ninety." A man's capacity may be fixed, but his ability may increase. And it is a duty he owes to himself, to society, and to his God—who is responsible for his initial endowment—to improve that ability and make himself a better and a more useful citizen.

ELBRIDGE COLBY.

RELIGION FOR CREDIT

I

The credit system, through the development of which the standardization of education was so extensively carried on in the past years, has been the butt of much praise and of much ridicule. It is considered by some the American contribution to modern education. Others decry it vociferously. They hold up to laughter the notion of reckoning that elusive thing, education, in time periods. So many hours of Latin and mathematics, mixed in equal proportions with so many hours of history and of science, all of it well shaken together and heated to a proper temperature, etc., etc., with the derisive exclamation mark ending the series! It is stigmatized as another example of the modern craze for reckoning everything in quantitative standards, of materializing things spiritual. After all has been said against the credit system of computing curricula, the question might still be pertinent: Just to what extent is this system really so much of a digression from any older standards of reckoning? Or as an unfailing silencer of such superior denunciation the question might be asked: What suggestion have you for a substitute?

The credit system is the outcome of educational experience on the part of educators. But educators themselves have never claimed to find in it an ultimate solution of educational standardization. Educators have always recognized a hidden danger in stressing credits quantitatively. Educational agencies that have had to do with standardizing and credits have been foremost in warning of the danger latent in the method, and of the insufficiency of such a viewpoint to settle the whole question of education. To stress the quantitative aspect of credits may indeed have a narrowing outlook on the whole matter of education. It may, by wrong emphasis, take the mind away from the real purpose, if not the very essence, of education. However, there are few true educators who will be thus influenced by dealing with credits; and those that are thus influenced, that succumb to a perversion of viewpoint, ought not to be found in the ranks of educators at all.

Even if the danger is not great for educators themselves, the warning of leaders in education is nevertheless very much in place. It is imperative for all teachers to be very conscious of this danger, so that the proper steps of precaution are taken and the remedy applied if necessary. The danger exists in fact as a great danger among students of colleges and high schools. These have not the background of more stable ideas and experience to counteract the wrong mental attitude that may develop from the system of credits.

That the wrong attitude is quite firmly intrenched in the minds of many students daily experience shows. Anyone who has acted as student adviser or as registrar or dean of studies can testify to that. How often is not the debate in the student's mind, regarding the taking of a subject that is not the least line of resistance, centered on the question: Do I need that for credit? Difficult subjects, not among the prescribed credits, are eschewed like a contagious disease. For an elective the easiest subject that will count as a credit is chosen. If an easy subject is discovered, the question is: How many credits can I get in that subject? The student reckons his advance in education by the number of credits he has already accumulated, or rather by the number he still has to earn in order to arrive at the minimum number required for graduation. Perhaps student advisers at times inadvertently help to establish this attitude more firmly by heedless replies, or by routine answers to questions that are for them routine. "Why must I take two years of this language?" "Because no credit is given for only one year of it."

The word *credit* in the student mind is one of rather vague content, though it is one to conjure by. It represents to the average student a sort of fetish that will help him to get somewhere, though he has no clear idea of where. It is a dim idol to which some sacrifices must needs be made. Naturally the sacrifices to the unknown *x* will not inspire enthusiasm. On the contrary, they will be gone through charily; as little as possible will be offered at the altar of the strange gods. The attitude thus resulting from thinking in terms of credits has not brought education in the mind of the student any closer to life. On the contrary, education becomes rather a conven-

tional formality that must be gone through before real life commences with a new start. Where the whole purpose of subjects is their credit value, the subjects cannot but have a foreign atmosphere about them. Of course every subject taught should be brought in touch with life and with views of life in every class-room or lecture hall. That is one of the duties of every teacher of every subject. But with the credit-attitude of students as a background to contend with, the efforts of the teacher will not be so fruitful of good as they would be under other circumstances. Much better would it be if all conditions and circumstances conspired towards a common effect. The attitude often resulting from the credit system has therefore not shifted the duty of teachers in this regard, or relieved them from this duty. It has increased the educational problem in one of its most vital spots. It necessitates more frequent and persistent exhortation and inculcation of the proper ideal of education.

II

The picture just drawn of the attitude that results from the emphasis of credits is a one-sided picture. It is overemphasized, naturally, as every point is, that should drive home. But it has its foundation of truth not only among high school students but also among college students, particularly of general arts departments. This has long been recognized in every section of the country. And the many attempts made in different colleges to meet the growing problem are inspiring. In the freshman year, courses are now made obligatory that will present the proper outlook on life. The vital bearing of education on life is stressed in special lectures. Even proposals to eliminate the unappreciative students without further ado have gone beyond the stage of mere suggestion. This general grappling with the situation is most encouraging; but it is also an indication that a real problem has been making itself felt with increasing persistence. The problem exists as much for Catholic schools in a general way as for others. Is there also a special aspect of this problem arising from the subject of religion, which forms a part of every curriculum in the Catholic school?

Though all Catholic schools do require some attendance at religious exercises, and regular attendance at religious instruction or discussion of religious truths, there is a wide difference among various colleges in the relation of this instruction to the other subjects of the curriculum. A glance at various catalogs will show that some colleges make a general statement to the effect that regular attendance at religious instruction is required of Catholic students, but in the curricula and courses no mention is made of the subject of religion, and no indication is given of its relation to the general scholastic life. Others consider classes in religion as an extra-curricular activity, no less expected, for that matter, of all Catholic students. Others again, and perhaps the majority of our colleges, place religion among the prescribed courses in every curriculum, and give credit value for it as for any other subject taken by a student. Is there any difference in these ways of handling the problem?

Naturally if the credit-attitude prevails in the mind of a student, his religion, too, will be studied for the same reason for which other subjects are studied. Such a student, we might say, will be quieted into taking religion because it "counts for credit," in the same way as he will be quieted into taking other subjects. His study of religion may then take on the same air of mechanical formality, or of sacrifice, as the study of his other subjects. It must simply be gone through patiently. The object is not religion but credit. Even where a proper appreciation does prevail of the value of education, a finicky mind may find something to object against the placing of religion on a par with other subjects of the curriculum, to be taken so many hours per week for some specified time, whereupon perfection is arrived at. Is perfection ever attained in religion, or is a person ever fully prepared mentally in that "subject"?

This finicky mind will claim that the duty of religion is unique in the high plane which it holds in life; and no one will gainsay that. In real life religion cannot be identified with the ordinary occupations of the day, though it should pervade them. It must always be given a time and a value over and above all other activities. Else it may be set aside

as a Sunday occupation over against the weekday occupations, and thus placed on a par with them. Just as religion, however, cannot be balanced against other duties, or be considered one of various separate duties, so too, it might be argued, religious instruction should not be put on a mere level with other courses. Specialized religious instruction is eminently worthy of being given and taken for its own sake alone; it is properly deserving of time and energy over and above that of any merely worldly pursuit. If religious instruction is not viewed in that light, but must be fortified unto acceptance by the number of credits allowed, it may be said not to attain its full aim.

All educational activities are rightly said to be only beginnings that must be continued throughout life. But this is in a special way true of religious activities. Language study may find later expression in the reading of literature, but the fundamentals of language will not engage much attention in after-school life. The same may be said of a greater part of mathematics and other subjects. It may also be said of religion, but it should not. Religious activities of every kind should continue in later life, and they should be fostered in the educational stage as much as possible in the same way in which they are to continue later on. For a full religious life it is not enough to give oneself at stated times to prayer or the attendance at Mass; some time and energy ought to be given also to pondering on the truths of religion, on the rational account that can be given of the faith one professes, and that for no purpose outside religion itself. Every Christian has also the duty of thinking about his religion, the more so the more educated he is. Unfortunately the practice of reading the home Bible and books explanatory of religion is not what is used to be, although the desire to know more about religious truths is apparently not on the wane. But just the one means of fulfilling this desire efficiently, the practice of discussing with oneself or with others the great things of religion, the mind's search for more light in these matters, is not customary.

Whether this condition can be improved or not by the stand that is taken on religious instruction may be a mooted ques-

tion. Educators, however, will be the last to deny the fundamental importance of general outlook imbibed by students not so much from direct words as from the more subtle thing called atmosphere, or to deny that the general attitude developed towards anything is usually more important than the direct words of instruction recited to the student. Nor will anyone deny that the attitude often instilled by the credit-system towards subjects of the curriculum is quite contrary to the attitude that should result from religious instruction—should it not rather be called religious discussion?—conducted in Catholic colleges. The credit attitude may be counteracted in many ways; and with the firm establishing of credits it is imperative to take special means to counteract such attitude in students. If these means are successful, then the effect on the attitude towards religion will also be minimized. With that, however, the whole problem of religious instruction in our curricula would not be solved. The matter of attitude described above as resulting from the credit outlook may in fact be only imaginary or exist only on a negligible scale. Other problems of religious instruction in its relation to the general curriculum still remain. There is the question of time, for instance, looming up large, if religion is not put on the same basis as other subjects; and always the question of overcrowding the curriculum, etc. In fact the variety of attempts to solve the whole matter is the best evidence that various problems do really exist, and that there is much need and room for exchange of opinions.

VIRGIL MICHEL, O.S.B.

BEGINNING WRITING

The following suggestions may prove helpful in taking the several steps in the process of developing skill in forming the letters. These lessons are begun on the first day in school and before the first lesson in reading are attempted.

Have the entire class stand. Extend the right arm out in front of the body, closing the fingers in toward the palm of the hand and keeping the elbow stiff. The teacher who is facing the class will use the left arm when she directs them to use the right arm. This will avoid confusing them. The teacher may make large circles in the air, the class watching. She may ask them what she is making. If they cannot tell, she may say that she has been making wheels. She may now direct them to make wheels. The teacher will give the directions and make the wheels before them. In the beginning, this process is purely imitative. Gradually, however, they come to associate the action with the given directions. Not more than three should be given at a time in order to avoid any strain on the tiny muscles. Repeat the same exercise using the left hand. If the first set of wheels were made with the outer stroke, the second set should be made with the inner stroke. After each arm has been exercised separately both may be exercised together. These muscles may be rested by raising and lowering the shoulders. Rest the hands by extending them and at the same time shaking the fingers. At another time the same exercise might be given, making the wheels at the right and at the left of the body as well as in front of the body. During the third period these exercises might be repeated.

On the second day, a fourth exercise that seems more like an exercise in writing is now given. Instead of holding the hand clenched as before, the fingers may be extended as though holding a piece of crayon. They will make the wheels as before with each hand. At another period, after repeating these exercises, the pupils may be directed to be seated and to bring the hand down easily and naturally on the desk. Using the same directions as before, they may make the circles or wheels on the desk several times. The teacher may now take six or eight children to the board. She will take her place

between the third and fourth or between the fourth and fifth, thus having an equal number on each side of her. In this way she can easily keep in touch with all. The remainder of the class may watch this exercise.

Standing with their backs to the board, the pupils may be directed to make the circles in the air as before. They may face the board and take the crayon. The pieces used should be short. They should be grasped by the side instead of by the point. This is to avoid finger movement and at the same time to decrease the strain on the tiny finger muscles, the controlling centers of which are more or less undeveloped when the child enters school. The teacher may describe circles in her place on the board, the children watching as before. After erasing, the teacher may now give the directions and the class may describe circles, one over the other, on the board. This group, having erased their work, may return to their seats, and the exercise will be repeated with another group. Not more than two successive groups should be taken during this first period. At another time in the day the other groups may be taken. In this way no one will become tired of the work. Moreover, those who have had a turn at the board and have later watched another group work at the board have received impressions that are being assimilated while the next turn is awaited.

At the next exercise the teacher will line the board with four parallel lines. Now they will be directed to make the circles between the top and the bottom line. Here a finer adjustment is required. The difficulty now will be to keep within the lines. It will be noted that perfection is not required in any step before a new step is taken. As the new is being acquired, the old is being perfected. All of this work may be accomplished at different periods during the first two days. By the time the lesson on the nest has been given and the word *run* has been developed, the class has acquired considerable skill in writing. It will now be a much simpler task for the child to express the word *run* than it was at first sight thought to be.

After the child has attempted to express the mental picture that he has of the word *run*, the lesson for acquiring the

technique in forming the several letters in the word may be given. In this exercise, the teacher takes her place as before between the third and fourth or between the fourth and fifth child, keeping an equal number on each side of where she is to work. Using some simple device for the purpose of appealing to the imagination the teacher will make the first stroke of the script letter R, the children watching her. Then they will make the corresponding stroke on the lined space assigned to them, stopping when they reach the first line. They watch while the teacher makes the second stroke of the letter; then they make the same stroke. In this way the entire word or entire story is written, one stroke at a time. This exercise is purely mechanical and, like the one in which they drew circles on the board, it is intended to develop muscular control and familiarity with the new tools, the crayon, the lines, and the blackboard. It is not expression and should not be substituted for it. The desire to express was prior to any skill he may have acquired. Experience shows us that exercises in technique will not produce the skill in writing that would have been acquired if they had been used in connection with daily exercises in free self-expression. The cause of this failure to provide abundant opportunities for free self-expression seems to be due to a feverish desire on the part of the teacher to have more perfect results to show for the day's work, although better results follow the use of the other method.

It might not be out of place to give one word of caution regarding these first lessons. Certain children seem to be too timid the first two or three days to go to the board. Have only those, who care to do so, pass to the board to write, trusting to the inward impulse to express and the instinct to imitate to urge the others to go. It has been observed that children who experience grave difficulty in handling the crayon and in forming the letters make great progress when allowed to write in the sand. Once a child has taken part actively in the lesson, the chasm separating the home and the school has been more effectively bridged than by any other single factor.

When the word *run* was taught, we called out into the center of consciousness the rich apperception of *run*, then we presented the visual symbol of that thought, the script word,

run. When the child watched the teacher write the word and when he did what the word "told him to do," the stimuli coming from the eye and from the muscles of the legs are all registered in the motor area of the brain. Thus all these centers—the thought center, the visual center and the motor center—have been connected. When the child wrote the word and when he followed the teacher in gaining the necessary skill in writing the word, these bonds of association were still further strengthened and the impression of the word in the visual area of the brain was rendered more permanent and more clearly defined. In reviewing this lesson we present the visual symbol, the script word, first. In all subsequent work we want the symbol to call up the thought. Consequently we must aim to have that symbol call up that thought from the very first day. To this end, the teacher asks the child to do what the word "tells him to do." If he cannot do this, the bond of connection between the word and the thought is not sufficiently strong. In this case the teacher may do it first, and then the class may do it. Our aim at this stage of the process is to link the thought and the word together, keeping the thought always in the foreground. The word is of no value in itself unless it calls up the thought for which it is the symbol.

Observing these cautions and following the method of presentation of the first word taught, it will be possible to teach the following material during the first month.

1. Run.	8. On the grass.	15. Good-morning.
2. Hop.	9. Little birds.	16. On the branch.
3. Skip.	10. To the nest.	17. Your mother.
4. Fly.	11. Mr. Robin.	18. Show.
5. Chirp.	12. To the tree.	19. Give and three.
6. To the door.	13. Peter.	20. Loves.
7. Sing.	14. Again.	21. Home.

The following suggestions may prove helpful in bringing out the several words and phrases to be taught the first month:

Hop.—Let us play we are robins. Which one of the robins will I be? Which ones will you be? The floor will be the lawn, and our nest will be in an imaginary tree in one corner of the room. How many have ever seen birds on the grass?

Children who can recall the picture may signify it by raising the hand. See if you can think what they kept doing all the time they were down on the grass. This is what I saw them do while I was looking at them. Teacher here hops about the grass if no one knows. The baby robins may hop with her. Let us hop over to the tree where our nest is. This lesson may follow one on the means God has provided for feeding the girds. Ability of the birds to hear any movement in the earth caused by the worms may be touched on. The details of all these lessons will differ with different teachers and even with the same teacher giving the lesson to different groups. The teacher may now step to the board and write the word *hop*, being careful to put a period after it. The children will watch while this process is going on. Pointing to the word and facing the class, the teacher may tell them that this word tells us what the robin did while we were out on the lawn. Let us do now what it tells us to do. Here the teacher may take the initiative and begin the action, the others following her example. Having returned to their seats again, the class watch while the teacher erases the board and writes the word again, observing the same cautions as before. Pointing to the word again, the teacher directs the group to do what the story tells them to do. The class may now be given an opportunity to write the word from the memory image. In this way the impression will have been strengthened. Note that certain children may think that the action was jump rather than hop. It would be better to let them think it than to permit the speech center to function. We have not as yet said what the word is.

Skip.—Where do you go in the morning after you have had your breakfast and are all washed and dressed. Show me how you came to school. If anyone in telling how he came to school should skip, then direct attention to that action. If no one skips, then the teacher may skip. Others may now skip about the room. How do you think these children who skip to school must feel? The teacher now steps to the board and writes the word, being careful that she places a period after the word. While the teacher writes the word the pupils watch her every move. In order to make this watching more and more easy, the teacher will write slowly. After a second she may direct the group to do what the story tells them to

do. Here the group will skip for a few seconds, and after they have returned to their places the teacher will erase the word and write it again, the children watching as before. This time they may try to express it from the memory picture, not copy from the board. If time permits, they may be given an exercise to develop skill in forming the letters of this or another word previously learned, or if they have by this time developed enough skill to copy from the board, they may do this as a seat task while the teacher is engaged with another group. Not even now does the child say what the word is.

Chirp.—When someone tells you something that makes you very happy, what do you always want to do? Usually someone knows that they want to tell it to someone. To whom do you think you would want to tell it if it made you very happy? They will probably say that they want to tell it to their mothers. To whom do you think the birds want to tell their little secrets? Have you ever heard little birds in the nest? What were they doing? They will imitate what they heard or what they imagined that they heard. Play you are little birds and show we how you would tell your secrets to each other. They will say, "Chirp, chirp, chirp." If they cannot do so, then the teacher may do so. The children may make the same sounds. In this particular case the manner of acting out what the story says consists in saying the word. Attention, however, need not be attracted to this point. They will not think of it as oral reading. The teacher may play with the children. She may be the mother bird, and they the little birds, and they will tell her their secrets. She may now step to the board and write, "Chirp, chirp, chirp." Here she writes it three times, not once, as in the case of *run*, *hop* or *fly*. The reason is obvious. The bird does not say *chirp* just once, but more than once. As before, she may tell the group that this story tells them what the little birds say to the mother bird in the nest and what the mother bird says to them. Then, as before, they may do it, always, however, in the spirit of play. As before, the teacher will erase and write the story again, the children watching. After it has been erased the group may pass to the board and write the words: "Chirp, chirp, chirp." Here, too, we are preparing them for stories of more than one word.

"On the grass."—How many have ever seen a robin? Every hand will go up. Where was he when you saw him? Here different answers may be given. This fact presents a difficulty. We are obliged now to separate out the right idea from the many that are given. What was the robin you saw doing? Now we are narrowing our field of thought down. When someone tells us that he is looking for something to eat we may then ask where he was and we will get the answer, "On the grass." Now we can play "This is the grass," pointing to a space on the floor. Who wants to be one of the robins? A number may be selected, and they may hop around on the grass and look for worms. The teacher may now step to the board and write, "Hop on the grass," saying, "this story tells you little robins what I want you to do." They thereupon do what the story tells them to do. Then she might put on, "Run on the grass." Those who can do what the story tells them to do may do it. Then "Skip on the grass." After this the teacher may select any one of these stories and write it on the board, and the children watching her every stroke as before. Then they may take their places at the board and write it from the memory picture. If the program allows, then a lesson in technique may follow. This step is taken after each of these words, although it has not been mentioned in each case.

"Little birds."—Whom do you think that Mother and Father Robin love the best? To whom do they bring breakfast? (If the class says to the baby birds, it is just as well. They have, without any help on our part, connected the idea of little birds and baby birds. To whom does Father Robin sing sweet songs? Which of the birds stay in the nest? Which of the birds do we hear chirp when Mother and Father Robin are out looking for worms? Play you are the little birds. Teacher writes "Chirp, little birds." The children taking this part do what the story tells them to do. If the class is of such a nature that they experience no difficulty in thinking what the words call up, then they may be asked to tell the others to do what the story tells them to do. Other combinations may be developed in the same manner.

SISTER M. ALMA, Ph.D.

HOMOLOGY AND ITS EVOLUTIONARY INTERPRETATION

(Concluded)

A moment's reflection will bring to light the preliminary flaw of *incomplete enumeration* of possibilities. To suppose that inheritance alone can account for *structural resemblance* is an unwarranted assumption. Without a doubt, there are other *similifying influences* at work in Nature besides inheritance. True, inheritance is *one* possible explanation of the similarity of organisms, but it is not the *only one*. Even among the chemical elements of inorganic nature we find analogous uniformities or *family-traits*, which in the absence of any reproductive process whatever, we cannot possibly attribute to inheritance. Mendeleff's discovery of the *periodicity* of the elements, arranged in the order of their atomic weights, is well-known. At each interval of an octave, a succession of chemical types, similar to those of the preceding octave, recur. Hence elements appearing in the same vertical column of the Periodic Table have many properties in common and exhibit what may be called a *family-resemblance*. Now, we have in the process of *atomic disintegration*, as observed in radioactive elements and interpreted by the electronic theory of atomic structure, a reasonably satisfactory basis upon which to account for the existence of these *inorganic uniformities*. Here analogous chemical constitution, produced in accordance with a *general law*, results in uniformity that implies a *similar*, rather than *an identical, cause*. The hypothesis of *parallelistic derivation from similar independent origins* accounts quite as well for the observed uniformities as does the hypothesis of *divergent derivation from a single common origin*. Why, then, should we lean so heavily on the already overtaxed principle of *inheritance*, when *parallelism* is as much a possibility in the organic world as it is an actuality in the inorganic world?

As to the contrast here drawn between inheritance and other *similifying factors*, it is hardly necessary to remark that we are speaking of *inheritance as defined in terms of Mendelian*

experiment and cytological observation. In the so-called *chemical theory* of inheritance, the distinction would be meaningless and the contrast would not exist. Erlich's disciple, Adami, sets aside all self-propagating germinal determinants, like the *chromomeres*, in favor of a hypothetical "biophoric molecule," which is to be conceived as a benzine-like ring bristling with sidechains. Around this determining core the future organism is built up in definite specificity, as an arch is constructed about a template. Adami has merely applied Erlich's ideas concerning metabolism and immunity to the question of heredity, commandeering for this purpose the latter's entire toolkit of receptors, haptophores, amboceptors, etc., as though this grotesque paraphernalia of crude and clumsy mechanical symbols (which look for all the world like the wrenches of a machinist, or the lifters used by the cook to remove hot lids from the kitchen range) could throw any valuable light whatsoever on the exceedingly complex, and manifestly vital, phenomenon of inheritance. It does not even deserve to be called a *chemical theory*, for, as Starling correctly remarks concerning Erlich's conception, "though chemical in form," it is not so in reality, because "it does not explain the phenomena by reference to the known laws of chemistry" (cf. *Physiology*, ed. of 1920, p. 1084). In a word, the theory of heredity, which seeks to strip inheritance of its uniqueness as a vital process by identifying with the more general physico-chemical processes occurring in the organism, is a groundless speculation, that, far from explaining, flouts, the very observational data which it pretends to elucidate. *Kurz und gut!* to requite the mechanist, Schaefer, with his own Danielsque phrase, here, as elsewhere, the mechanists have succeeded in extracting from the facts, not what the facts themselves proclaim, but what pre-existed in their own highly cultured imaginations, so well stocked with cogs, cranks, ball-bearings and other aesthetic imagery emanating from polytechnic schools and factories.

But in arguing from the existence of *parallelism* in the inorganic world to its possibility in the organic world, we are less liable to displease the mechanists than those other extremists, the neo-vitalists, who will be prone to deny all

parity between living, and inanimate, matter. Fortunately, we are in a position to appease the scruples of the latter by referring to the facts of *convergence* as universally accepted evidence that the phenomenon of parallelism occurs in animate, as well as inanimate nature. Admitting, therefore, that the laws of organic morphology are of a higher order than those which regulate atomic, molecular and multimolecular structure, these facts attest, nevertheless, that parallelisms arise in organisms of separate ancestry which are due, not to heredity, but to the *uniform action of universal morphogenetic forces*, and that *general laws* can consequently be invoked to account for organic uniformities with the same right that they are invoked to account for resemblances existing between the various members of a chemical "family" like the Halogens. And why should this not be so? Organisms have much in common that transcends any possible scheme of evolution and that cannot be brought into alignment with the position arbitrarily assigned them in the evolutionary family-tree. They all originate as single cells. Their common means of growth and reproduction is mitotic cell-division. This leads to the production of somatella, among the protista, and to a soma differentiated by histogenesis into two or three fundamental tissues, among the metista. All these fundamental processes are strikingly uniform throughout the entire plant and animal world. In these universal properties of living matter, therefore, we have a *common basis* for general structural and organizational laws, which though irreducible to the "common ancestors" of Transformism, is quite adequate to account for both the homologies and analogies of living matter. Accept this basis of general laws regulating the development of living matter, and there is no difficulty in seeing why the problems posed by exposure to analogous environmental conditions are solved in parallel fashion by organisms, irrespective of whether they are nearly, or distantly, related, in the sense of morphology. Transformism, on the other hand, can only account for *homology at the expense of convergence*, and for convergence at the expense of homology. So far as a *common ancestral basis* is concerned, the two kinds of resemblance are, from the very nature of the case, *irreducible phenomena*.

It is only, then, by surrendering the principle that similarity entails community of origin, and by falling back on the suggested common basis of *general laws*, that Transformism makes room in its system for the troublesome facts of *convergence*. "It might be reiterated in passing," says Dwight, "that this 'convergence' business is a very ticklish one. We have been taught almost word for word that resemblance implies relationship, or almost predicates it; but according to this doctrine it has nothing to do with it whatever" (*Thoughts of a Cath. Anat.*, p. 190). And in a subsequent chapter he says: "No very deep knowledge of comparative anatomy is needed for us to know that very similar adaptations for particular purposes are found in very diverse animals. The curious low-grade mammal, the *ornithorhyncus*, with a hairy coat and the bill of a duck, is a familiar instance. We all know that whales have the general form of the fish, although they are mammals, and going more into details we know that the whale's flipper is on the same general plan as that of the ancient saurians. . . . The origin of the eye, according to evolutionary doctrines, has been a very difficult problem, which gets worse rather than better the more you do for it. Even if we could persuade ourselves that certain cells blundered along by the lucky mating of individuals in whom they were a bit better developed than in the others till they came to form a most complicated organ of sight, it would be a sufficient tax on our credulity to believe that this could come off successfully in some extraordinary lucky species; but that it should have turned out so well with all kinds of vertebrates is really too much to ask us to swallow. But this is not all: eyes are very widely spread among different classes of invertebrates. More wonderful still, the eyes of certain molluscs and crustacea are on stalks, and this is found also in various and very different families of fishes. How did this happen? Was it by way of descent from the molluscs or the crustacea? If not, how could chance have brought about such a similar result in diverse forms?" (*op. cit.*, pp. 233-236).

It may be objected that the resemblances of *convergence* are *superficial analogies*, not to be confounded with funda-

mental homologies. The distinction, however, as applied to problem at hand, is arbitrary and its validity may well be questioned. When the skeletal homology that relates the amphibia to the mammals, for instance, is traced to the root of the vertebrate family-tree, we find it all but disappearing in a primitive *Amphioxus*-like chordate, whose so-called skeleton contains no trace of bone or cartilage. Hence, if we go back far enough, *the homologies of today become the convergences of a geological yesterday*, and we find the vertebrate type of skeleton arising independently in reptiles, mammals, amphibia, and fishes. Moreover, there are times when *convergent analogies* appear to be *more representative of the common racial heritage* than the *underlying structure* itself, tempting the evolutionist to fly in the face of the orthodox interpretation, which rigidly rules out analogy in favor of homology, and refuses to accept the eloquent testimony of a remarkable resemblance merely because of a slight technical discrepancy in the structural substrate. A large pinching claw, or chela, for example, occurs in two organisms belonging to the phylum of the arthropods, namely, the lobster and the African scorpion. Both chelas are practically identical in structure, but, unfortunately the chela of the lobster arises from a *different appendage* than that from which the scorpion's chela emerges. If they arose from corresponding appendages, they would be pronounced "homologous organs" and acclaimed, without hesitation, as strong evidence in favor of the common origin of all the arthropods. In proof of this, we call attention to the importance attached to the adaptations affecting *homologous bones* in fossil "horses." As it is, however, the two chelas are *analogous*, and not *homologous*, organs. Hence, technically speaking, the two chelas are utterly unrelated structures. To the eye of common sense, however, the likeness appears to be far more important than the difference, and the average person will be inclined to view the resemblance as evidence of a community of type. In fact, the tendency to discard superficial, and to retain only fundamental, uniformities, is dangerous to the theory of Transformism. When we confine our attention to what is really basic, we find that the resemblances become so generalized

and widespread that specific conclusions as to descent become impossible, and we lose all sense of direction in a clueless labyrinth of innumerable, yet mutually contradictory, possibilities. Finally, it may be noted in passing that, though it is customary with evolutionists to regard *homologous characters* as the tenaciously persistent *heritage* of primeval days, and to look upon *adaptational characters* as an *accessory* and *subsequent acquisition* accruing to the aforesaid primitive heritage, the former class of characters fail to give, by the manifestation of *greater fixity*, any empirical evidence whatever of their being more deeply and firmly rooted in the hereditary process than the latter. We have, therefore, no experimental warrant for appropriating homologous, rather than adaptational, characters to the process of inheritance. "It is sometimes asserted," says Goodrich, "that old-established characters are inherited, and that newly begotten ones are not, or are less constant, in their reappearance. This statement will not bear critical examination. For, on the one hand, it has been conclusively shown by experimental breeding that the newest characters may be inherited as constantly as the most ancient. . . . While, on the other hand, few characters in plants can be older than the green color due to chlorophyll, yet it is sufficient to cut off the light from a germinating seed for the greenness to fail to appear. Again, ever since Devonian times vertebrates have inherited paired eyes; yet, as Professor Stockard has shown, if a little magnesium chloride is added to the sea-water in which the eggs of the fish *Fundulus* are developing, they will give rise to embryos with one median cyclopean eye! Nor is the suggestion any happier that the, so to speak, more deep-seated and fundamental characters are more constantly inherited than the trivial or superficial. A glance at the organisms around us, or the slightest experimental trial, soon convinces us that the apparently least-important character may reappear as constantly as the most fundamental. But while an organism may live without some trivial character, it can rarely do so when a fundamental character is absent, hence such incomplete individuals are seldom met in Nature" (*Science*, Dec. 2, 1921, p. 530).

But, whether it be upon, or beneath, the surface, similitude of ANY KIND suffices to establish our contention that inheritance is not the only similiifying influence present in organisms, and that resemblance is perfectly compatible with independence of ancestry. We have, therefore, an alternative for inheritance in the explanation of organic uniformities, and by the admission of this alternative, which, for the rest, is *factually attested* by the universally acknowledged phenomena of *convergence*, the inference of common descent from structural resemblance is shorn of the last remnant of its demonstrative force, as an *a posteriori* argument.

But a still more serious objection to the evolutionary interpretation of *homology* and *preadaptation* arises from its *intrinsic incoherency*. Evolution, as previously stated, is assumed to be the resultant of a two-fold process, namely, *inheritance* and *variation*. The first is a *conservative* and *similiifying* process, which *transmits*. The second is a *progressive* and *diversifying* process, which *diverts*. To the former process are due the uniformities of *homology*, to the latter the deviations of *adaptation*. Upon the admission of evolutionists themselves, however, *neither of these processes behaves in a manner consistent with its general nature*, and both of them are flagrantly unfaithful to the principal rôles assigned to them. Nowadays the **HEREDITY** process transmits **ADAPTATIONAL**, as well as **HOMOLOGOUS**, characters. If, then, *adaptational characters* are *more recent* than homologous characters, there must have been a time when inheritance ceased to similiify and became a *diversifying process* by transmitting what it did not receive from the previous generation. There were times when, not content with simply reiterating the past, it began to divert former tendencies into novel channels. In other words, inheritance becomes *dualized* into a paradoxical process, which both perpetuates the old and appropriates the new. The same *inconsistency* is manifest in the process of *variation*, which capriciously produces *convergent*, no less than *divergent*, adaptations. In two *fundamentally identical* structures, like the wing of a bird and the fore-leg of a cat, variation is said to have produced *diverse adaptations*. In two *fundamentally diverse* structures, like the respective burrow-

ing legs of the mole and the mole-cricket, variation is said to have produced an *identical adaptation*. It appears, therefore, that the essentially *diversifying* process of variation can become, on occasion, a *similifying* process, which, instead of solving environmental problems in an *original manner*, prefers to employ *uniform* and *standardized* solutions, and to cling to its old stereotyped methods. *Inheritance similifies* and *diversifies*, *variation converges* and *diverges*. It is futile to attempt to reduce either of these *protean processes* to a condition that even approximates consistency. The evolutionist blows hot and cold with the same breath. Verily, his god is Proteus, or the double-headed Janus!

Summa summarum: The evolutionary argument from homology is defective in three important respects: (1) in its lack of experimental confirmation; (2) in its incomplete enumeration of the disjunctive possibilities; (3) in its inability to construct a scheme of transmutation that synthesizes inheritance and variation in a logically coherent, and factually substantiated formula. The first two defects are not necessarily fatal to the argument as such. Though they destroy its pretensions to conclusiveness, they do not preclude the fulfilment of the moderate claim made on its behalf by Prof. T. H. Morgan, who says: "In this sense (i.e., as previously stated) the argument from comparative anatomy, while not a demonstration, carries with it, I think, a high degree of probability" (*A Critique of the Theory of Evolution*, p. 14). The third defect is more serious. The apparently irreducible antagonism which the evolutionary assumption introduces between inheritance and variation has been sensed even by the adherents of transformism themselves, and they have searched in vain for a formula, which, without sacrificing the facts, would bring into concord the respective rôles of these discordant factors. "It follows," says Osborn, "as an unprejudiced conclusion from our present evidence that upon Weismann's principle we can explain inheritance but not evolution, while with Lamarck's principle and Darwin's selection principle we can explain evolution, but not, at present, inheritance. Disprove Lamarck's principle and we must assume that there is some third factor in evolution of which we are ignorant"

(*Popular Science Monthly*, Jan., 1905). The point is well taken, and unless, as Osborn suggests, there is a *tertium quid* by means of which the discord can be resolved into ultimate harmony, we see no way of liberating the theory of Transmutation from this embarrassing dilemma.

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EDUCATION IN NOVA SCOTIA BEFORE 1811

(Continued)

Almost from its inception the progress of the Orphan School was retarded by financial difficulties. Its maintenance during the first year involved an expenditure of 233 pounds, 10 shillings. A yearly appropriation of 588 pounds was voted for its use in 1761, but this fell short of meeting expenses incurred for that year by 125 pounds. The expenditure was heavy and rather disproportionate to the number of children provided for, considering that they numbered but 32. Mr. Belcher attributed the unsatisfactory condition to "the too unlimited expense in the number admitted and in the conduct of this charity."¹⁰¹ He intimated that henceforth the charity was to be confined to its original intention.

Between the years 1750 and 1754 several ships arrived at Halifax bearing immigrants from the Continent. These were mostly Germans and Swiss. With the Germans came their own teacher, a man named Gottfried Jorpel. As they were without a minister, they engaged Mr. Jorpel to lead in the singing and read divine service to them in the little Lutheran church they had erected in Dutch Town.¹⁰²

In company with the Germans and Swiss came a number of Protestant French, chiefly from the town of Montbéliard. Their minister and teacher, Jean Baptiste Moreau, a native of Dijon, in Burgundy, arrived in advance. His mission was two-fold—to act as preceptor to the Protestant French and to convert the Catholic French already settled in the country.¹⁰³

It was represented in the letter of the Lords of Trade to the S.P.G. in 1749 that all the inhabitants of Nova Scotia to the number of 20,000 were French Catholics whose clergy took

¹⁰¹*Ibid.*, Vol. 37, Doc. 11.

¹⁰²Roth, Luther D., *Acadie and the Acadians*, 3rd ed., Press of L. C. Childs & Son, Utica, N. Y., 1891, pp. 108; 113.

¹⁰³Akins, Thomas B., *A Sketch of the Rise and Progress of the Church of England in the British North American Colonies*, p. 17. DesBrisay, Mather H., *History of the County of Lunenburg*, Toronto, William Briggs, 1895, p. 81.

orders from the French Bishop of Quebec; and it was recommended that if some of the ministers and schoolmasters sent out by the Society were able to speak French they might be "particularly useful in cultivating a sense of the true Protestant religion among the said inhabitants and educating their children in the principles thereof."¹⁰⁴ Mr. Moreau wrote the Society from Halifax in July, 1750: "I shall endeavor by assiduous toil as soon as the French Protestants, for whom we wait here shall arrive, to recall to the truth a great number of people who are suffering here under the weight of error and Ignorance."¹⁰⁵

When the majority of foreign immigrants moved to Merliguesh in 1753, Moreau followed them. Here the new township of Lunenburg had been surveyed and planned. Moreau went to supervise general religious activities, but more especially to teach the Calvinists and convert the few French families already settled there. Mr. Sey (or Ley), as assistant to Moreau, watched over the spiritual needs of the Germans. To compensate him for his services the Council at Halifax voted him a gratuity of five pounds.¹⁰⁶

Since Mr. Jorpel had remained behind in Dutch Town, no teacher was available for the German children. Moreau referred the situation to the administrators and was informed that when Mr. How, who was on his way from England, arrived he would be sent to fill the vacancy provided he acquiesced to the German proposals and was willing to teach without public salary.¹⁰⁷ The Council apparently modified its intention, for the next year it appropriated four pounds each for the benefit of the Lutheran and Calvinistic teachers at Lunenburg.¹⁰⁸

An English school of more stable foundation was conducted at Lunenburg in 1758 by Mr. Bailly, an Anglican minister. It seems, however, to have been poorly attended. Moreau attributed this condition to dread of the Indians, but more

¹⁰⁴ Akins, Thomas B., *A Sketch of the Rise and Progress of the Church of England in the British North American Colonies*, p. 17.

¹⁰⁵ *Collections of the Nova Scotia Historical Society*, Vol. 7, p. 125.

¹⁰⁶ *Public Records of Nova Scotia*. Vol. 210, p. 49.

¹⁰⁷ *Ibid.*, Vol. 134, p. 13.

¹⁰⁸ *Ibid.*, Vol. 210, p. 49.

likely it was due to the disaffection of the German element in the population.¹⁰⁹ Mr. Bailly's school was an English school, not at all to the liking of the Germans. They obstructed its progress by persistently refusing to send their children to Bailly for instruction. One of their number, a catechist of the name of Schultz, was engaged to set up a school in opposition to the English institution. Here he conducted services in the Lutheran rite and disciplined and taught the German children of the settlement. More success attended Bailly's efforts among the French, however. They showed themselves more amenable, sending a fair proportion of their children to the English school to be taught reading, writing and the catechism.¹¹⁰

As time went on, the discontent among the Germans of Lunenburg became more active and acute, the trouble being centered chiefly about the question of education. The expectations of the Germans seem to have been to establish themselves in a segregated settlement, where they would be free to perpetuate the customs and traditions of the home land. They were out of sympathy, consequently, with a school system that aimed at the complete anglicanization of their children. They wanted German schools disciplined by German school masters.

On the other hand, the S.P.G. policy was not designed to foster evidences of national differences opposed to British sentiment and tradition. To educate the people into a uniform belief in religion was its prevailing purpose. Against the successful prosecution of this design the Germans presented a more stubborn obstacle than did the French reacting more aggressively than the latter to what they regarded as an encroachment on their privileges. When, with a view of pacifying the turbulence, Reverend Robert Vincent was sent to Lunenburg as missionary and teacher in 1762, the situation was extremely critical. Violent demonstrations in protest against the school policy were made. No persuasion could induce the Germans to support the English school; they were determined and fixed in their intention to have a German

¹⁰⁹*Reports on the Canadian Archives*, 1894, p. 216.

¹¹⁰*Ibid.*, pp. 95, 216.

teacher for their children at any cost. If coercion were attempted, there was danger that it would lead to serious consequences. Vincent's instructions, nevertheless, directed him to establish an English school. One hundred acres of land were reserved for his use. As teacher he was voted a yearly salary of twenty pounds by the Governor's Council at Halifax and five pounds additional by the Society for the Propagation of the Gospel in Foreign Parts.¹¹¹

Vincent's appointment added fresh impulse to the prevalent discontent. The Germans were disappointed. After the coldness shown his predecessor they entertained the hope that the educational policy would undergo some modification and that their wishes would be consulted in the selection of the next teacher. Although Vincent estimated the number of German children in the settlement under twelve years of age to be 596, none of them came to his school for instruction.¹¹²

As a probable remedy for the provoking situation he requested the privilege of engaging a teacher from among the Germans to assist him with his classes, "for," he said, "the Germans are unwilling to have an English education if it costs them anything."¹¹³ Gotlieb Neuman, who had taught the German children prior to Vincent's arrival, accepted the proffered position. Although Neuman enjoyed a measure of favor among the German element, the administration of his classes under Vincent's supervision was displeasing to them. Vincent had to report in 1764 that the people of Lunenburg were very indifferent about sending their children to be taught. His mission, like Bailly's, was apparently a failure. The Council, at least, convinced that such was the case, withdrew the grant of twenty pounds. Left with but the S.P.G. allowance of five pounds, Vincent was obliged to discharge Neuman.¹¹⁴ Dissolution of the school followed almost immediately.

Vincent's failure was not due altogether to his own improvidence. His orders relative to the conduct of his school were

¹¹¹*Public Records of Nova Scotia, Vol. 204; Reports on the Canadian Archives, 1894, p. 229.*

¹¹²*Reports on the Canadian Archives, 1894, p. 230.*

¹¹³*Ibid., p. 239.*

¹¹⁴*Ibid., p. 259.*

explicit. Mr. Belcher appreciated his efforts and in his behalf exhorted the Society to raise his status thereby making him eligible for the full pay of a schoolmaster.¹¹⁵

Under the strain and worry of his onerous duties Mr. Vincent's health began to fail soon after the breaking up of the school. His last official communication to the Council is somewhat pathetic—he expresses surprise that his salary should be discontinued without premonition and prays that the allowance for rent be retained. Following this appeal, he resigned and setting out for London late in the fall of 1765, after six months of inactivity, he died in Halifax on November 15.¹¹⁶

In the chronicle of Jung, of contemporary date, the school difficulty at Lunenburg is imputed to the passive attitude the administrators assumed towards the educational aspirations of the Germans. They saw, he said, with injured feeling that the French proprietors, whom they outnumbered five-fold, were provided with a teacher at the moment of settlement while they were constrained to wait several years in the hope that similar recognition would be taken of the needs of their children.¹¹⁷ "And," continues Jung, "because we could no longer endure to see the pitiful condition of our children, growing up in ignorance, we determined to wait no longer upon our superiors. We accordingly made the necessary arrangements among ourselves without governmental aid, and finally succeeded in securing the services of a German school teacher in the year 1760."¹¹⁸ When attendance at the school was good, he writes, "hindrances were laid in our way by those who should have given us aid. At this time the Reverend Robert Vincent came into our settlement as English missionary. The services were conducted by him in the English language. He took our German schoolmaster under his patronage and control, paying him a salary of five pounds per annum. . . . The German language was entirely abolished from our school, and the order was issued that those who would not study the English language would not be allowed

¹¹⁵*Ibid.*, p. 229.

¹¹⁶*Ibid.*, pp. 264; 265.

¹¹⁷Roth, Luther D., *op. cit.*, pp. 206-207.

¹¹⁸*Ibid.*, pp. 245-246.

¹¹⁹*Ibid.*, pp. 245-246.

to attend the school. . . . Through this the school was broken up."¹¹⁹

From their point of view the Germans had, no doubt, sufficient cause for complaint. They wanted to preserve their religion and they wished, even more ardently, perhaps, to perpetuate their language. Both these elements were in jeopardy in English schools supervised by Anglican schoolmasters who were at the same time ministers of their church.

From the moment of their arrival in Halifax the Germans showed disappointment with the prospects the country offered for settlement. Likely it differed considerably from what had been represented to them. But though they may have been misinformed in respect to conditions obtaining in the colony, they had no cause to complain that they had been deceived in the matter of schools. No mention is made in the records of the period of assurances made the Germans that they were to enjoy educational privileges in their own tongue. Jung's criticism of government, that it offered no support to the Germans in providing for their teachers, seems a bit unjust. State documents of the province show that in 1754 four pounds were appropriated by the Council for the benefit of a Lutheran teacher at Lunenburg.¹²⁰ He was probably Mr. Sey. As he was not, apparently, of German selection, Jung does not reckon him one of their teachers. Later on, though, as in the case of Neuman, German teachers at Lunenburg received compensation other than that provided by the inhabitants themselves, the fact that they taught under supervision of the English school put them outside the class of representative German schoolmasters. It was not until many years after the departure of Vincent that the Germans at Lunenburg procured a teacher acceptable to their wishes.

Private Schools in Halifax.—In Halifax, the Orphan School was throughout this period the only institution for the public education of children. Yet among the older people, as a rule, a fair degree of scholarship prevailed. They being engaged usually in some department of governmental administration or commercial activity, the nature of the work stimulated learning to some extent. Many of the inhabitants, moreover,

¹¹⁹See above.

had received a good education in the old country. Occasionally they turned their talent towards private tuition. An act passed by the Council on the 10th of May, 1753, dispensing schoolmasters from obligation of bearing arms in the militia helped along this tendency.¹²¹

In the absence of public schools, private schools made their appearance early in Halifax. An advertisement in the first issue of the *Halifax Gazette* of date March 23, 1752, is the first notice we have of the existence within the town of a school for private instruction:

At the sign of the hand & pen at the south end of Granville Street are carefully taught by Leigh & Wragg, spelling, reading, writing in all its different hands, arithmetic in all its parts, merchants' accompts, or the true method of bookkeeping in a new and concise manner. Likewise all parts of the Mathematics, & for the convenience of grown people improving their learning any of the above arts & sciences will be taught 2 hours every evening at 6 o'clock.

N. B. The above Leigh draws engrosses and transcribes writing of all kinds, & adjusts accompts of ever so difficult & will keep them in methodical way by the year.

N. B. The Mathematics by Wragg the other parts by Leigh. Sold at the above place Quill pens inks writing papers writing and spelling books & slate pencils.¹²²

PATRICK WILFRED THIBEAU.

(To be continued)

¹²¹*Public Records of Nova Scotia*, Vol. 209, pp. 36 et seq.

¹²²*Halifax Gazette*, Vol. 1, No 1, March 23, 1752.

CLASSICAL SECTION

Inquiries on any phase of the teaching of the classics are earnestly sought by the editor of this section. If these questions are of sufficient general interest, they will be answered in these columns, otherwise by correspondence. Teachers of the classics are also urged to send us such information as devices, etc., which they have evolved through their own experience and may wish to place at the disposal of others.

THE HIGH SCHOOL LATIN LIBRARY

1. Miscellaneous General Works. (See Classical Section in September number of *REVIEW*.)

2. Dictionaries and Grammars.

Too often does one enter a Latin class-room which possesses no other dictionary of Latin words than the vocabulary in the back of the textbook. Latin classes in such circumstances must confine their activities entirely to the text. There can be little individual effort on the part of the pupil to observe the Latin around him in his daily life, according as his mind is so stimulated in the class-room, if these larger dictionaries, the instruments whereby he may verify his ideas, are not within his reach. Accordingly we consider the following dictionaries as absolutely necessary for a school which aims to conduct its Latin classes according to the latest approved methods.

Harper's Latin Dictionary (Lewis and Short). American Book Co.

Smith, W., English—Latin Dictionary. American Book Co.

Harper's Dictionary of Classical Literature and Antiquities (Peck). American Book Co.

There is a growing tendency to abandon the use of a Latin Grammar during the entire high school Latin course. This is due in a great measure to the introduction of textbooks after the first year which have an epitome of Latin grammar at the end. Often, too, the first-year book accompanies the class throughout the four years. The weakness of such a procedure has been commented on before in these columns.

Suffice it to repeat here that the first-year book should be abandoned entirely after the first year, and some standard grammar should be adopted for purposes of reference in the work of the last three years. Furthermore the teacher should aim to acquire all of the Latin grammars printed in English. Every Latin grammar has certain strong and weak features, and the energetic teacher will soon discover these and improve his knowledge of the language in the process. The following are especially to be commended.

Lane, G. M., *A Latin Grammar*. American Book Co. (For the teacher's use only.)

Bennett, C. E., *A Latin Grammar*. Allyn and Bacon.

Allen & Greenough, *New Latin Grammar*. Ginn & Co.

Burton, H. E., *A Latin Grammar*. Silver Burdett & Co.

D'Ooge, *A Concise Latin Grammar*. Ginn & Co.

Gildersleeve & Lodge, *Latin Grammar*. D. C. Heath & Co.

Apropos of the use of the lexicons, the following questions were put by the State Board of Education to the Department of Latin in every high school in Texas. They may be taken to heart by all departments of Latin.

1. Has your school a Harper's unabridged Latin Lexicon?
2. Have you some unabridged English Lexicon?
3. Are your students taught each year at the beginning of the session, how to use these lexicons?

Certain interesting facts that should form a part of the preliminary study of these lexicons were also given, among others the following:

1. Both lexicons are approximately the same size, covering around 2,000 pages each.
2. The English lexicon is approximately 60 per cent Latin in origin. To put this statement another way, a fundamental knowledge of the Latin dictionary will enable any ambitious student to understand also 60 per cent of the English lexicon.
3. Literary English is composite, being made up principally of these three factors: Latin, 60 per cent; Anglo-Saxon and Greek, a little less than 30 per cent. Latin words are marked L; Greek, Gk; and Anglo-Saxon, A.S. It is to be noted that other languages, except French, are seldom given as sources.

Latin words often come through the French to get into the English language.

The Oxford Concise English Dictionary is one of the best for individual use.

4. Words should be studied under three great heads: roots, prefixes, and suffixes.

What are the general accepted periods of Latin literature?

Latin literature in its broadest sense is often divided in a general way as follows:

1. Roman Literature, i.e., the literature of pagan Rome.
2. Latin Writers of the Early Church.
3. Latin Writings of Mediaeval and Modern Times.

In a narrower sense, Latin literature includes all writings in the Latin language belonging to the period when Latin was spoken as a vernacular. With this sense "Latin literature" and "Roman literature" are often used as synonymous terms.

A more detailed division of the periods of Latin literature, and one usually accepted by scholars is the following:

1. The Ante-Classical Period. From Livius Andronicus to the Supremacy of Sulla. 248-83 B.C.
2. The Classical Period. From the Supremacy of Sulla to the Death of Hadrian. 83 B.C.—180 A.D. The latter date is the best *terminus ad quem* since it includes Suetonius.
 - a. The Golden Age. From the Supremacy of Sulla to the Death of Augustus. 83 B.C.—14 A.D.
 - b. The Silver Age. From the Death of Augustus to the *floruit* of Suetonius 14.—180 A.D.
3. The Post-Classical Period. From Suetonius to Boethius. 180-550 A.D.
4. Mediaeval and Modern Times. 550 A.D.—

A work entitled "Selected Articles on the Study of Latin and Greek," by L. T. Beman, has been brought to our attention frequently of late. The author endeavors to present, through a selection of articles and excerpts, both sides of the question as to the advisability of retaining Latin and Greek in our school curricula. Statements in favor of retaining the Classics are arranged first, while those eager for their complete abolition are placed last. In spite of the author's assertion that

his aim is to present both sides of the question without bias, his own anti-classical convictions are evident enough. The very arrangement of the articles is in favor of the anti-classicalists. In the selection of material for the negative side, the author has failed to distinguish between arguments aimed against poor teaching of the Classics and those aiming to annihilate these studies completely. Short excerpts from such articles do not make this distinction clear to the average reader. Again an article by Dr. Flexner, "Education as Mental Discipline," is printed wherein false charges are made regarding the quality of Latin teaching in our schools, and this in spite of the fact that Mr. Beman shows by his bibliography that he is familiar with an article ("The Sham Argument against Latin," by Charles H. Forbes), which exposed the erroneous statements. These are but a few indications that stamp this book a subtle bit of anti-Classical propaganda.

What shall we do with a child who will not or cannot learn Latin?

The answer to this question would seem obvious enough. However, the whole matter presents itself thus to the writer.

The average girl or boy who has completed his elementary education satisfactorily and has not been instilled with prejudice against the subject, will have little or no trouble with the study of Latin, *provided he is taught properly*.

There are, however, certain boys and girls who are by nature incapable of any difficult language study such as the study of Latin. Such students can be recognized very easily, and should not be forced in any way to continue with the work. Before any great time is lost, they should be directed to other subjects the study of which will to a certain degree compensate for the loss of that culture and training which they failed to acquire through a study of the Classics. They should of course in no measure be discouraged from continuing their efforts toward an education, but should receive ample encouragement.

The pupil who has been poorly trained in his previous work, especially English, and is accordingly discouraged with the result of his attempts to master Latin, should not be allowed to flounder along, increasing his discouragement and wasting

his time. Such a type should receive special instruction to eradicate his weaknesses at the very beginning of his Latin course.

The type of pupil who persists in his distrust of the value of studying the Classics, in spite of the efforts to disillusion him, is also an undesirable person in the Latin class. He does harm not only to himself but to the other members of the class.

Many pupils, however, while very slow in learning the ancient languages, if well taught, maintain a real enthusiasm for the Classics, and with patience on the teacher's part attain excellent results.

Of special value to all teachers of languages is the new book, "Language: Its Nature, Development, and Origin," by Professor Otto Jespersen, and published by Henry Holt and Company. The volume is divided into four so-called books: Book I on "The History of Linguistic Science," Book II on "The Child," Book III on "The Individual and the World," and Book IV on "The Development of Language." The work presents an excellent account of the rise and development of linguistic studies, which of course proceeded seriously only during the last century, and discusses lucidly general linguistic principles. It makes an excellent companion volume to Conway's "The Making of Latin" as part of the library of a busy teacher of Latin, who has time to read but comparatively few books.

The following extract from the *Classical Review* (published by the Classical Association of England) will be of special interest to all Catholics interested in Classical studies.

"Few men have deserved better either of Classical scholarship or of Classical scholars than Father F. Ehrle, S.J. (now Cardinal Ehrle), who has done so much to make the Vatican Library an accessible and comfortable center of study. His eightieth birthday is approaching, and a large and influential committee, representative of Europe and America, has issued an appeal for subscriptions to a volume (or, rather, three volumes) of *Miscellanies* in his honor."

Roy J. DEFERRARI, PH.D.

EDUCATIONAL NOTES

CARDINAL BOURNE ON UNIVERSITY EDUCATION IN ENGLAND

In his presidential address, delivered at the National Catholic Congress at Birmingham early in August, His Eminence, Cardinal Bourne, dwelt on the fact that there is no university in England, at the present time, capable of granting advanced degrees in the Sacred Sciences which would be recognized as valid by the Holy See. He suggests the creation of a faculty of theology in close contact with Oxford or Cambridge. Four lecture rooms would be sufficient for a beginning, with five professorships, one in Scholastic Philosophy, one in Theology, one in Morals and Ethics, one in Ecclesiastical History, and one in Holy Scripture. Says the Cardinal:

Our want, our deficiency, is this. There is at present in England no university capable of granting academic degrees in Theology, Philosophy, or Canon Law, recognized as valid degrees by the supreme authority of the Catholic Church, namely, the Holy See. If a young Catholic, cleric or layman, desires to obtain such a distinction—valuable in the eyes of all Catholics; obligatory, according to the law of the Church, for the holders of certain ecclesiastical positions—he must, even as in the days of persecution, leave his own country, to seek and obtain what he desires abroad. No one, least of all myself, will minimize the enormous value of a sojourn, for purposes of study, in other countries; or undervalue the debt which we owe for the advantages that we have obtained in the past, and shall not cease to seek, from Rome, Paris, Louvain, Fribourg, or Innsbruck. But the fact remains that the intellectual equipment and academic organization of the Catholics of England will not be complete until we have in our midst, on our own soil, a duly constituted and endowed Faculty of Theology and Philosophy recognized as such by the Apostolic See.

How is this to be obtained, not in meager fashion, but in a form worthy of England and of the glorious traditions of the past?

The same problem has presented itself in modern times to other countries. Belgium has recreated Louvain, Switzerland has founded Fribourg, the United States has built up Washington, Holland has in contemplation some similar endeavor—in every case a Catholic University embracing in the place of highest honor a faculty such as I have described.

Is this the precise situation? Are these the exact models that it would be wise for us to follow in England? While applauding and envying these magnificent examples of Catholic energy and generosity, I am constrained, looking at our past history, and our present and all probable future conditions, to say that I feel convinced that we must build in other fashion. Our circumstances are obviously entirely different.

In the first place, Oxford and Cambridge are living facts, the product in old days of Catholic faith and love of learning, part of the vital history of our country, unparalleled elsewhere. If, when our own conscience barred our entrance to them, my great predecessor, Cardinal Manning, with his boundless influence and perseverance, failed to obtain for the project of a Catholic University any real sympathy or tangible support, how, in these days, when the gates of Oxford and Cambridge are open wide, and are eagerly entered by an ever-growing number of earnest Catholics, both of the clergy and of the laity, could we again essay a now utterly hopeless task? Look as one may in every direction for a solution of the problem, here today in England I can see but one, namely, the creation of such a faculty as I have described, at the very side of, in close contact with, but in needful independence of, one or other or both of our great, ancient, national universities. Such a solution would, I believe, meet the needs and amply fulfill all the requirements of the problem which confronts us.

1. It would complete the abundant, all-but complete culture which Oxford and Cambridge are able to afford us; and it would give the one thing still wanting, the *unum necessarium*, which the Church and her authority alone can bestow.

2. If, as may be prudently hoped, the Holy See gave canonical "status" to a faculty so constituted, our students would thus be able to obtain at home in England the Catholic academic distinctions which they at present are obliged to seek abroad; while at the same time they would be in close touch with those other facilities of intellectual development of which these ancient universities are the custodians and the dispensers.

3. In these modern days it may well be supposed that the setting up of such a faculty would not be unwelcome to the university whose proximity it sought and desired, but might rather show itself worthy to win approval, acceptance, and recognition from the academic authorities in a fashion not incompatible with the ecclesiastical jurisdiction claimed and exercised over it by the Catholic Church.

The realization of such a scheme would have results of incalculable effect, far beyond the immediate object that we have in view. The lectures would, of course, be open, so far as

space would admit, to all who cared to hear them. For the first time since the sixteenth century we should be offering to our fellow-countrymen, in the very heart of an ancient center of learning, the knowledge and the highest and most scientific teaching of the wisdom enshrined in, and carefully guarded by, the Catholic Church. This, after all, is part of our mission, to give to the learned, as well as to the unlearned, all the treasures which the full revelation of Jesus Christ contains, in proportion to their capacity for receiving it. There are many, not yet of our own body, who would welcome these new sources of knowledge in addition to those others which they already possess in our great universities in such abundance and profusion.

Then England would gradually once again possess a school of Catholic theology able to be her spokesman and representative before all the other great academies, both ancient and modern, which are part of the heritage and glory of the Church. The days of our national theological insignificance would, as time went on, come finally to an end.

I know not, indeed, of any hope or project for the future of more consequence for the spreading of truth, and thus for the Divine glory, than the realization of some such dream as this one for which I plead today.

THE LECTURE GUILD

We are in receipt of the fifth annual circular of *The Lecture Guild* announcing the subjects of the principal lecturers for the coming season and giving a short description of each lecturer.

The Guild has already arranged a tour the end of January for Dr. George Hermann Derry, who gave his 241st public address of the year to one of the largest and most enthusiastic audiences of the Catholic Summer School last month.

Miss Catherine Bregy, who has just returned from a trip to France and England for the study of the present trend of literature and drama, will be on tour in December. Mr. Padraig Colum, who has added to his delightful talks on Irish folk lore and literature The Myths and Legends of the South Seas which he studied by invitation of the Hawaiian legislature, will be on tour in November, as will Mr. Michael Williams of the Calvert Associates. T. A. Daly, Aline Kilmer, Father Donnelly, S.J., and many others are on the list.

Anyone interested has but to send his name to *The Guild*,

requesting that it be put on the mailing list, in order to get the circular and announcements of tours free of charge.

Officers of organizations are especially requested to send in their names and that of their organization, with a permanent address when possible.

Detailed information will gladly be sent on application to the secretary, Miss Blanche Mary Dillon, 7 East 42nd Street, New York, N. Y.

EDUCATIONAL PERIODICALS FOR SEPTEMBER

Catholic School Journal: There are three articles of an inspirational nature—"Initiative," by Brother Leo; "Efficiency in the Schoolroom," by Irene H. Farrell; "Mental Bric-a-brac," by Sister Mary Paula. There is a warning against "pitfalls" in the article on "Teaching of Religion," by Rev. C. Bruehl, Ph.D. Dr. Bruehl's point is that the religion teacher should be on guard against making statements that have no foundation in reason and revelation. Mary E. Partridge contributes a practical article on "Drawing Outlines for the Eight Grades." Rev. J. Joseph Kelly, Ph.D., gives his thoughts on "Educational Deficiencies." If anyone is interested in teaching the principle of the conservation of energy to a third grade class in geography, Sister Mary Alma, Ph.D., will show them how it is done.

Catholic School Interests: Rev. Albert C. Fox, S.J., writes on "Our Scorn for Higher Schooling." Rev. Joseph M. O'Hara, Superintendent of Parish Schools, Philadelphia, offers some practical suggestions under the caption, "Factors That Make for Efficiency in Teaching." "The Present Status of Visual Education" is discussed by Frederick Dean McCluskey, of the University of Illinois. There is a reprint of a paper by Father McNally, Rector of the Catholic High School, Philadelphia, on "A Practical High School Curriculum."

American School Board Journal: The school janitor is an important official and it is not at all strange that administrators should consider ways and means of increasing his efficiency. There are some practical suggestions in the article, "The Janitor and Janitorial Service," by W. N. Anderson. A. M. McCullough discusses "The Technique of Supervision in the

Small City." Self-rating scales for teachers have proven a valuable aid to supervision and a promising means of improvement of teachers in service. E. D. Phillips points out some defects in scales already in use and offers a suggested scale that appears promising. J. N. Mallory indicates ways and means of "Following Up a Testing Program."

Education: Samuel M. Levin gives the results of a close study of the social courses in secondary schools. He feels that materials and methods have been improved and that the high school is in a better position than ever to prepare students for their social obligations. Leslie D. Zeleny's "Conception of Liberal Education in American High Schools" is interesting. Rolland M. Shreves' "Changing Conceptions of the Recitation" lists a number of the newer devices that are being used with a view of making class work more vital.

Educational Review: The machine has served to shorten the hours of work for the average man and thus has increased his leisure time. W. D. Ross shows very interestingly how this situation forces the schools to regard the "Right Use of Leisure as a Objective in Education." He discusses some practical measures the school should take in absolving this function. There is much common sense in Alfred L. Hall-Quest's article on "World Education." He shows how the diversities of religious, national, and cultural views that obtain in the world would render anything like a common curriculum impossible, and believes that not uniformity but common effort to educate according to normal ideals is necessary. There is a very interesting article on "American and English University Life: a Contrast," by William A. Robson. J. O. Allen writes on "American History in the American Public School." He makes a plea for such teaching of history as will render American ideals more adaptable to the demands of everyday living.

Pedagogical Seminary: Adolph E. Myers describes "Berlin Schools for Gifted Children." The method of determining which children are gifted is interesting. The intelligence test is not the only means used, but is supplemented by observation of the children in the ordinary play life. The curriculum is a very strong one. As a result of an experimental investigation on the teaching of homonyms, E. O. Finkenbinder has

found that "for permanent retention, the 'separate method' is far superior to the method commonly employed of studying both words of a pair of homonyms together." "The Gospel of Magnanimity," by G. Stanley Hall, is a strong plea for an attitude of supererogation toward the problems of life, and a turning away from the agencies that work from without inward, toward a revision and review of our own inner lives. Much the same thought is expressed in the splendid article by Kimball Young on "The Integration of the Personality."

G. J.

REVIEWS AND NOTICES

Composition and Rhetoric, by William M. Tanner, Boston University. Boston: Ginn and Co., 1923. Pp. 500 + xxxviii.

The author of this book need make no apology for its appearance in the already overcrowded field of high school English texts, for he here presents in an unusually clear and convenient form the basic material desired by the high school teacher of English composition. Designed as a guide book and a reference to be used throughout the four years of high school, and as a means for self-cultivation in English, it emphasizes always with both teacher and pupil the necessity of forming correct habits of speaking and writing. It includes the elements of rhetoric and of standard usage, but these are made to serve in the building up of good habits of oral and written expression through intelligent and directed exercise. The author's years of experience as a teacher of high-school classes in English and later of college students in the same subject have enabled him to adapt the text with peculiar fitness to the actual capacity and immediate needs of the average high school student.

Nothing novel appears in the four main divisions of the book: an introduction to oral and written expression; the units of composition—the paragraph, the sentence, the word; the four forms of prose discourse; and a review of grammar, to which is added a chapter on spelling. But throughout there is a clear-cut thoroughness and solidity, combined with a freshness of appeal, which ought to be effective against the looseness of thought and expression common among high school students. To this end, the following features should be especially serviceable: the intensive work on sentence structure; the chapter on special cautions in grammar; the three chapters on the use of words, followed by another on the use of the dictionary; and the treatment of punctuation as an aid to exact expression.

Illustrative material and models for study have been selected, for the most part, from standard authors. Only two student compositions have been included, and these are of a quality to warrant their insertion. No space is wasted on faulty student themes for correction.

The chapter on the short story, which gives its characteristics

and essentials, and illustrates these by well-known examples and references to standard collections, supplies adequate treatment of this literary type for high school classes. Further help for the teacher of literature is to be found in the appendix under the headings, "Suggestions for Studying the Principal Types of Literature" and "Suggestions for Using a School Library."

SISTER M. CATHERINE.

Our Nation's Builders, A Catholic Textbook on American History for Grades 5 and 6. By S. M. G., Chicago: Benjamin H. Sanborn & Co., 1923. Pp. 370.

This little historical reader by a nun of St. John Evangelist Convent of Schenectady, New York, will prove helpful in arousing interest in American history on the part of children of the lower grades. It is well written, simple in style, and appealing in story. Great Americans in part tell their own story, and their narrative is completed by the writer. It is a lesson in patriotism and tolerance, in obedience and morality, and in religious fervor which the Sister would teach. But the heroes are strangely virtuous, and, in their youth, hardly human little boys.

In all there are fifty sketches: Columbus, Ponce de Leon, Balboa, Magellan, de Soto, the French explorers, Verrazzano, Cartier, Ribault, Laudonnière, and de Monts, Champlain, Cabot, Hawkins, Drake, Raleigh, Standish, Winthrop, Roger Williams, Hudson, Dutch in America, Baltimore, Penn, Marquette, La Salle, the Colonial Wars, Wolfe, Sam Adams, Patrick Henry, Washington, Greene, Franklin, Jefferson, Hamilton, Moylan, Bishop Carroll, Charles Carroll, the O'Brien Brothers, John Barry, Paul Jones, Eli Whitney, Fulton, McDonough, Jackson, McCormick, Clay, Lincoln, Grant, Lee, Roosevelt, and Wilson. The chronological order is followed, whereas a system of classification (as explorers, colonizers, inventors) would have been more effective. The selections are rather good. One might question if Moylan's career could not have been sketched under Washington. Again, one wonders why the O'Brien Brothers should be featured. Certainly they were not Catholics, and certainly they are practically unknown to Protestant students. The uninitiated might think of a large contracting company. The French Huguenot

explorers need not have been emphasized. McDonough might have been replaced by some Catholic figure as Dongan, Sheridan, Rosecrans, Taney, Hughes, and Charles O'Conor among others. It is well that the writer included a few non-military leaders, but strange that no literary men, orators, big business men, philosophers, and jurists, are listed among American builders. Again, one would expect a heroine or two, though in describing her hero's boyhood the author is appreciative of the mother's influence. However, such a list is difficult to compile and satisfy the whims of every teacher and the exactations of every school board.

In the revision, which we trust a deserved sale will soon make necessary, it is to be hoped that a few erroneous impressions and an occasional slip in date or fact will be rectified. Strange enough these little errors are more frequent in the distinctly Catholic portions of the book, possibly because the secondary sources are poorer in this same respect. The legends of American history are wisely omitted. There is no attempt to claim too much, no tendency to overestimate the Catholic contribution, save perhaps when Bishop Carroll's connection with the religious clauses in the Federal Constitution are considered.

RICHARD J. PURCELL.

History of Our Country for Higher Grades, by Reuben Post Halleck, M.A., New York: American Book Company, 1923. Pp. 534+38.

Intended for the higher grades, Mr. Halleck's excellent textbook is sufficiently full for a high school course with a little outside reading. It is a rather substantial volume with many splendid features. Each chapter has a list of thought-questions, a suggested list of readings for pupils, references for teachers, and illustrative novels. These bibliographies include the most recent books, for instance, the *Chronicles of America* (1919), and offer a hint to the teacher that she must read widely if she will teach history successfully. There are a number of maps, even an industrial map of the United States, which add much to the volume. Then the unusual number of well-selected cuts and prints will appeal alike to teacher and pupil.

The author sees America in a large way and attempts to tell her history so that the pupil will grasp the development of the nation, material, social, and intellectual. The pupil should grasp the true contribution of the United States, for the author has striven to show the development of democracy in political and social life, the rise of toleration, and the influence of the various racial elements in building the commonwealth. He writes in a liberal spirit, devoid of sectional or other bias.

In the early section Professor Halleck evaluates the European contribution without the usual laudation of the Reformation as the beginning of a new and glorious era. In describing the Spanish explorers, he enlarges upon their desire to preach the Gospel and serve their sovereign rather than on their gold-hunger. Of the southwest missions, he adds: "These were built for Spanish missionaries whose aim was to teach the Indians religion and useful arts and trades and to care for the sick" (p. 27). Prints of the Columbus Memorial in Washington and of the Italian Memorial in New York to Verrazzano are welcome illustrations. The pupil is taken over the route of Joliet and Marquette, as illustrative of French exploring and missionary activities in the west. Of Indian life and culture much is said.

In early Virginia, Plymouth, and Massachusetts Bay the narrative brings out their true contribution to American culture, yet there is no hesitancy in describing Puritan intolerance. Roger Williams and Baltimore are featured as establishing the idea of general toleration, and this especially in connection with Maryland. In New York, there is a reference to Dongan, but an encomium of doubtful accuracy on Leisler. One wonders, too, concerning the million Huguenots who are said to have left France after the revocation of the Edict of Nantes. The founders of Pennsylvania, Georgia, and the lesser colonies are skillfully woven into the general story. The French and English Colonial Wars are well-treated, and in suggesting Indian loyalty to the French, Mr. Halleck readily assigns it to more favorable treatment and to love of the missionaries. In this connection, he writes:

The French Catholic priests who came to New France spared no effort to convert the Indians. They went to distant and hostile tribes and some were tortured to death, but neither

torture nor martyrdom turned them back. Father Marquette, one of the most famous of these priests, was both explorer and missionary. The Indians loved him so that when he was sick they became his escort for a ninety-day journey (p. 130).

The account of the Revolutionary War is fair, and while detached does teach loyalty to patriot and founder. Nathan Hale is deemed worthy of a page and an illustration of his belated memorial on the Yale campus. The Carrolls are missing, but it is merely an oversight. Father Gibault's aid in the Roger Clark expedition is not unrecorded. The outline of the critical period, the framing of the Constitution, early administrations, slavery question is quite full. Social life is at all times stressed. The Civil War and Reconstruction are described in the tone of one who realizes that the chasm between the sections is bridged over.

About a third of the book deals with the period since the Civil War, a highly desirable proportion of the space. The economic development of the nation and America as a world power are the central themes. The World War is briefly but well outlined. In this connection, the author, like practically every writer, bears finer testimony to the welfare work of the Y. M. C. A. than the boys from the trenches.

RICHARD J. PURCELL.

The Child's Book of American History, by Albert W. Blaisdell and Francis K. Ball. Boston: Little, Brown & Co., 1922. Pp. 218.

This is a revision of a handy little historical reader which first appeared in 1913. Read in connection with any of the elementary school texts, it will stimulate interest in the historical outline, for in simple diction it dramatically describes some of the outstanding events and men in our early orational development. There is appended a lengthy bibliography of books and readers for children, which teachers may find serviceable in building up a grade school library. The writers err in one important particular, that of ending with the Civil War. Surely in western expansion, railroad-building, the Spanish War, and the World War there was subject-matter for a continuation of an otherwise excellent reader. No child will be satisfied with a book which omits the war in which

his elder brother participated. He is far more interested in Pershing than Miles Standish.

RICHARD J. PURCELL.

Books Received

Educational

Bonser, Frederick G., and Mossman, Lois Coffey, "Industrial Arts for Elementary Schools." New York: Macmillan, 1923, pp. 491.

Dickson, Virgil E., Ph.D., "Mental Tests and the Classroom Teacher." Yonkers-on-the-Hudson: World Book Co., 1923, pp. 231.

Brewer, John M., "Godwin and Wheatley's Occupations." (Revised.) Boston: Ginn and Co., 1923, pp. 441.

McLaughlin, Catherine E., and Troxell, Eleanor, "Number Projects for Beginners." Lippincott's School Project Series. Philadelphia: J. B. Lippincott Co., 1923, pp. 124. Price, \$1.60.

Welling, Jane Betsy, and Calkins, Charlotte Wait, "Social and Industrial Studies for the Elementary Grades." Lippincott's School Project Series. Philadelphia: J. B. Lippincott Co., 1923, pp. 371. Price, \$2.00.

Wheat, Harry Grove, "The Teaching of Reading." Boston: Ginn and Co., 1923, pp. 346.

Wood, Ben D., "Measurement in Higher Education." Measurement and Adjustment Series. Yonkers-on-the-Hudson: World Book Co., 1923, pp. 337.

Textbooks—Economics

Splawn, W. M. W., and Bizzell, W. B., "Introduction to the Study of Economics." Boston: Ginn and Co., 1923, pp. 386. Price, \$1.72.

Williamson, Thomas Ross, "Introduction to Economics." Boston: D. C. Heath and Co., 1923, pp. 538.

English

Ward, C. H., "Sentence and Theme." (Revised.) Chicago: Scott, Foresman and Co., 1923, pp. 473.

Eleanore, Lester M., "The Literary Essay in English." Boston: Ginn & Co., 1923, pp. 260.

Greek

Machen, J. Gresham, "New Testament Greek for Beginners." New York: Macmillan, 1923, pp. 285.

Murray, Gilbert, "The Choephoroe of Aeschylus," translated into rhyming verse. New York: Oxford University Press, American Branch, 1923, pp. 84. Price, 90 cents.

Lucas, F. L., "Euripides, the Media," partly in the Original, partly in Translation. New York: Oxford University Press, American Branch, 1923, pp. 96. Price, \$1.20.

Latin

Butler, H. E., "Apuleius, Cupid and Psyche," partly in the Original, partly in Translation. New York: Oxford University Press, American Branch, 1923, pp. 128. Price, \$1.20.

Greenough, J. B., Kittredge, G. L., and Jenkins, Thornton, "Virgil's Aeneid and Ovid's Metamorphoses." Boston: Ginn and Co., 1923, pp. 169-264. Price, \$1.92.

Petitmangin, H., and Fitzgerald, John A., "Latin Grammar Made Clear," from the Original French of Prof. H. Petitmangin. New York: Funk and Wagnalls Co., 1922, pp. 317.

Pilsbury, E. H., "Latin Prose Composition for Middle and Upper Forms." New York: Oxford University Press, American Branch, 1922, pp. 200. Price, \$1.20.

Place, Perley Oakland, "Second Year Latin." New York: American Book Co., 1923, pp. 568.

Sanford, Frederick Warren, and Scott, Harry Fletcher, "A Junior Latin Reader," Lake Classical Series. Chicago: Scott, Foresman and Co., 1922, pp. 416-480.

Scott, Harry Fletcher, "First Latin Lessons," Lake Classical Series. Chicago: Scott, Foresman and Co., 1922, pp. 304.

Mathematics

Baker, Howard Bates, "A First Book in Algebra." New York: D. Appleton and Co., 1923, pp. 298.

Hart, Walter W., "Junior High School Mathematics," Three Books. Boston: D. C. Heath and Co., 1921.

Rushmer, C. E., and Dence, C. J., "High School Algebra." New York: American Book Co., 1923, pp. 400.

Smith, David Eugene, "Essentials of Plane Geometry." Boston: Ginn and Co., 1923, pp. 296.

Wells, Webster, and Hart, Walter W., *Modern High School Algebra.*" Boston: D. C. Heath and Co., 1923, pp. 466.

Miscellaneous

Beer, Pauline G., "Chemistry as Applied to Problems of Home and Community." Philadelphia: John B. Lippincott and Co., 1923, pp. 547. Price, \$3.50.

Cook, Charles Gilpin, "Chemistry in Everyday Life," with Laboratory Manual. New York: D. Appleton and Co., 1923, pp. 454.

Dolan, Rev. Thomas S., "Plain Sermons." Philadelphia: The Peter Reilly Co., 1923, pp. 403.

Walsh, James J., "Cures," the Story of Cures that Fail. New York: D. Appleton and Co., 1923, pp. 291.

Ward, Rev. Felix, C.P., "The Passionists." New York: Benziger Brothers, 1923, pp. 478.

Wavle, Ardra Soule, and Burke, Jeremiah Edmund, "Stories of the Emerald Isle." Boston: D. C. Heath and Co., 1923, pp. 190.

An Ursuline of Alaska, "Life of Reverend Mother Amadeus of the Heart of Jesus." New York: The Paulist Press, 1923, pp. 233.